

## 5.0 LONG-TERM IMPLICATIONS OF THE PROJECT

### 5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The Guidelines for the California Environmental Quality Act (CEQA), Section 15126.2 (c), require that an Environmental Impact Report (EIR) consider and discuss significant irreversible changes that would be caused by implementation of the proposed project to ensure that such changes are justified. The CEQA Guidelines specify that the use of nonrenewable resources during the initial and continued phases of the project should be discussed because a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary and secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) should also be discussed because such changes generally commit future generations to similar uses. Irreversible damage can also result from environmental accidents associated with the project and should be discussed.

In the case of the proposed project, implementation would redevelop a site currently developed as a “tank farm” that contains aboveground storage tanks (ASTs), pipelines, and equipment associated with petroleum product storage and transfer. The proposed project includes the development of a commercial retail center that will include a Home Depot store on a 16.7-acre development parcel within a larger 17.8-acre parcel in the City of Long Beach (City). Once developed, the project will have indefinitely altered the characteristics of the site from industrial uses to commercial retail uses.

Construction of the project will result in a commitment of limited, slowly renewable, and nonrenewable resources. Such resources may include certain types of lumber and other forest products; raw materials such as steel; aggregate materials used in concrete and asphalt such as sand and stone; water; petrochemical construction materials such as plastic; and petroleum-based construction materials. In addition, fossil fuels used by construction equipment will also be consumed. Project construction will also result in an increased commitment of public maintenance services such as waste disposal and treatment.

Similarly, operation of the proposed project will result in the commitment of limited, nonrenewable resources, and slowly renewable resources such as natural gas, electricity, petroleum-based fuels, fossil fuels, and water. Natural gas and electricity will be used for lighting, heating and cooling of buildings, and operation of project facilities. As stated in Section 4.10, Public Services and Utilities, the project is expected to result in an annual electricity demand of 2,435 megawatt hours per year and demand for approximately 463,000 cubic feet of natural gas per month. Although this represents an increase in demand for both resources when compared to existing site conditions, the increases are within the existing delivery capacity of service providers. The project will not result in a significant impact related to the provision of natural gas or electricity. In addition, Title 24 of the California Code of Regulations requires conservation practices that will limit the amount of energy consumed by the proposed project. Compliance with Title 24 is mandated by the State. Nevertheless, the use of such resources will continue to represent a long-term commitment of essentially nonrenewable resources.

Operation of the proposed project also requires an increase in potable water. The total average daily project demand for potable water is estimated to be 38,448 gallons per day. Sufficient water supplies are available to service the project, and project impacts are less than significant. However, the increase in water use will continue to represent a long-term commitment of this essentially nonrenewable resource.

On-site surface water drainage in the developed condition will be substantially different from the existing condition, as described in Section 4.7, Hydrology and Water Quality. Mitigation measures are required to ensure that project hydrology will meet drainage system standards and that pollutants of concern will be controlled through implementation of structural and nonstructural best management practices (BMPs).

Site topography will be modified per the conceptual grading plan for the site, and topographic features of the site will be altered. Views from the surrounding areas will continue to be available after project implementation, although views from the site and of the site will be permanently changed. The visual change from the existing condition to the project condition is not significant due to low building heights, modern architectural design, and substantial landscaping elements. Perimeter landscaping will visually screen the project site from roads and surrounding areas. In addition, mitigation measures have been included to reduce impacts related to the creation of new sources of light and glare to a less than significant level.

Operation of the project would result in increased traffic to and from the site. As discussed in the traffic analysis in Section 4.11, Traffic and Circulation, project impacts to four intersections remain significant after mitigation. The project would also generate air emissions from both mobile and stationary sources during construction and operation. During peak grading days, total construction emissions of nitrogen oxide ( $\text{NO}_x$ ) and particulate matter less than 10 microns in diameter ( $\text{PM}_{10}$ ) would exceed the daily thresholds established by the South Coast Air Quality Management District (SCAQMD) even with mitigation. Long-term operational emissions associated with project-related mobile sources would exceed carbon monoxide (CO), reactive organic compounds (ROC), and  $\text{NO}_x$  thresholds based on emission factors for 2004. While the implementation of mitigation will further reduce these emissions, they remain above the threshold levels and are significant even after mitigation.

As discussed in Section 4.6, Hazards and Hazardous Materials, the proposed project does not pose a health risk as a result of soil contamination or any other health and safety hazards. Since the project does not include uses that would generate or use substantial amounts of hazardous waste, and construction activities or site operation will not cause additional short- or long-term health risks, the project does not contribute to potential long-term public health and safety impacts.

The commitment of limited, slowly renewable, and nonrenewable resources required for the construction and operation of the proposed project will limit the availability of these resources for future generations or for other uses during the life of the project. However, continued use of such resources is consistent with regional and local plans and projected growth in the area. No other significant irreversible changes are expected to occur as a result of project implementation.

## 5.2 GROWTH-INDUCING IMPACTS

Section 15126 (d) of the State CEQA Guidelines requires that an EIR analyze growth-inducing impacts and states that an EIR should discuss the ways in which the project could foster economic or population growth or construction of additional housing, either directly or indirectly, in the surrounding environment. Impacts associated with the removal of obstacles to growth as well as the development of facilities that encourage and facilitate growth are considered to be growth inducing. However, the CEQA Guidelines also state that it should not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The project will result in the development of a 17-acre site zoned for general industrial (IG) uses. The proposed project site is currently developed with industrial uses and is served by all utilities and public services except natural gas and sewers. The project will not remove obstacles to growth in a previously undeveloped area.

The potential for the project to generate additional growth in the City is unlikely because the proposed development is intended to primarily serve existing residents of the City. The employment potential of the project is not of a magnitude that would cause significant numbers of people to relocate to the area solely for the purpose of being close to the site. Based on these considerations, the proposed project would not induce population growth in the community or result in economic growth that exceeds levels anticipated in plans adopted by the City of Long Beach.

## 6.0 ALTERNATIVES TO THE PROPOSED PROJECT

### 6.1 INTRODUCTION

#### 6.1.1 Overview

CEQA requires that an EIR describe a range of reasonable alternatives to the proposed project, or to the location of the proposed project, that could feasibly attain the basic project objectives. The EIR must also evaluate the comparative merits of the alternatives. This chapter sets forth and evaluates potential alternatives to the proposed project, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR:

- *The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*
- *The No Project Alternative shall be evaluated along with its impact. The No project analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved.*
- *The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.*
- *Factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.*
- *For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.*
- *An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.*

In identifying alternatives for this EIR, alternatives were selected by the applicant and the City that comply with CEQA requirements and would otherwise be reasonable and feasible for the project site, in consideration of the characteristics of the area and public comments received during the Notice of Preparation (NOP) comment period and at the public scoping meeting on April 7, 2004.

### 6.1.2 Alternatives Discussion

Section 21100 of the Public Resources Code and Section 15126 of the CEQA Guidelines require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. Alternatives to the proposed project that are being considered for analysis in this EIR are outlined below.

- **No Project/No Development:** This alternative would involve no changes to the existing conditions of the project site
- **Reduced Project Alternative:** The Reduced Project Alternative consists of a home improvement store with no other retail uses on the site, a reduction in developed area of 18,000 square feet (139,529 square feet versus 157,529 square feet for the proposed project)
- **Warehouse Alternative:** This alternative consists of developing the site with a warehouse, consistent with the industrial zoning of the property
- **Light Industrial Alternative:** The light industrial use considers development of the site with uses such as printing plants, material testing laboratories, assembly of data processing equipment, and power stations

For each alternative, the analysis provides the following:

- Description of the alternative
- The impacts of the alternative and significance of those impacts (per the CEQA Guidelines, significant effects of an alternative shall be discussed, but in less detail than the significant effects of the project as proposed)
- Comparison of the alternative relative to the proposed project, specifically addressing project objectives, feasibility, the elimination or reduction of impacts, and comparative environmental merits

### 6.1.3 Alternatives Withdrawn from Further Consideration

The City previously identified the following alternative that has been determined to be infeasible.

**Alternate Site Location Alternative.** Section 15126.6 (f)(2)(A) of the CEQA Guidelines describes the “key questions and first step in analysis” as “whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location.” The significant unavoidable adverse impacts of the proposed project include traffic, construction air quality, long-term operational air quality effects (CO, ROC, NO<sub>x</sub>), cumulative long-term air quality effects, and cumulative project impacts associated with solid waste disposal capacity at Class III landfills. Construction and operation of a home improvement store-based shopping center would have approximately the same effect as the proposed project with regard to the volumes of traffic generated, construction and operational air emissions, and solid waste generation. The effect of project-generated traffic would vary with a different location, depending on the existing and future levels of

service on the adjacent and nearby roads. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR.

The principal component of this project is a home improvement store. Secondary components of the project are supporting, freestanding commercial uses. According to the project proponent, the minimum site size for a home improvement store is approximately 11 acres. Home Depot, the project proponent, has identified southeast Long Beach as its market area. The siting requirements identified by the proponent are sites east of Ximeno Avenue and south of Atherton Street.

The City of Long Beach is nearly built out, with little vacant land available for development. The General Plan and aerial photographs were used in order to identify potential alternative sites for the proposed project within the City limits. The City of Long Beach "Disposition of Vacant Land" map (Summer 2001) was also reviewed. This map identifies 11 sites with development potential. The Los Cerritos Wetlands site is the only location in the market area identified by Home Depot.

The Los Cerritos Wetlands are located on three sites located north and south of 2nd Street at Studebaker Road. The first site is bound by Studebaker Road, the Los Cerritos Channel, Pacific Coast Highway, and 2nd Street. The second wetlands site is bound by 2nd Street and the Haynes Water Intake Channel. The third site straddles the San Gabriel River and is located east of Pacific Coast Highway.

The majority of the property is owned by the Bixby Ranch Company, and currently there are active oil extraction activities on site. The City's adopted land use plan for the area where the wetlands are located, known as the Southeast Area Development and Improvement Plan (PD-1 [SEADIP]) area, is also known as Planned Development-1 (PD-1), adopted in 1977. The annexation agreement that was approved by the Long Beach City Council at the time that a large portion of the site was annexed into the City (a portion was already within City limits) stipulated that the City support development of the site in accordance with PD-1 (SEADIP). The site was never developed, however. One of the constraints to the land transfer is continued oil-extraction activities.

While the wetlands site under Bixby Ranch Company ownership totals 263 acres, the area with actual development capability is much smaller and fragmented. PD-1 (SEADIP) calls for wetlands restoration of the area south of the San Gabriel River; therefore, there is no development potential for this portion of the property. The PD-1 (SEADIP) designation for the area north of 2nd Street is primarily wetlands and a Least Tern habitat and nesting area. PD-1 (SEADIP) allows for residential development on a nearly 50-acre area north of 2nd Street at a density of 15.3 residences per acre, for a total of 764 units. PD-1 (SEADIP) permits business park uses for the site between 2nd Street and the San Gabriel River; however, any development proposal for the site would be subject to review and approval by the California Coastal Commission. The Coastal Act encourages use of sites on or near wetlands and on wetlands waters that are water dependent, such as wetlands restoration areas, marinas, and incidental public infrastructure. A commercial center with a home improvement store is not a water-dependent use and would not be consistent with the Coastal Act. Development of the Los Cerritos Wetlands would result in significant effects to biological resources. Given the limitations imposed by the Coastal Act and the constraints associated with development of coastal wetlands, the use of the Los Cerritos Wetlands as an alternative site for the proposed project is considered infeasible.

## **6.2 PROPOSED PROJECT**

A summary of the proposed project and the project objectives of are provided in Chapter 3.0 of this EIR, which can be used for reference in evaluating the comparative merits of the alternatives. For a detailed discussion of the proposed project's impacts, refer to Chapter 4.0, Existing Setting, Impacts, and Mitigation Measures.

### **6.2.1 Project Description**

Refer to Chapter 3.0, Project Description, for a detailed description of the project characteristics and other actions required as part of the project implementation.

### **6.2.2 Project Objectives**

Each alternative is analyzed to determine whether it achieves the objectives of the proposed project. The project objectives listed in Chapter 3.6 are repeated below and numbered for reference in this chapter.

1. Provide a conveniently located commercial retail center that includes a home improvement store as well as other retail center amenities that serve the needs of local residents, commercial and industrial developers, businesses, and employers in south Long Beach
2. Design and implement comprehensive site development standards that minimize adverse impacts to the environment through sensitive land use planning and design features
3. Provide an economical reuse of the project site while minimizing adverse impacts to surrounding properties
4. Allow for the transition of the project site from underutilized industrial property to new uses that can provide jobs and economic activities that promote economic revitalization and growth in conjunction with the goals, programs, and policies included in the City of Long Beach's General Plan and PD-1 (SEADIP)
5. Enhance the economic vitality of the City of Long Beach and provide property tax, sales tax, and other revenue opportunities

### **6.2.3 Environmental Impacts of the Proposed Project**

The following discussion provides analysis of alternatives to the proposed project, including comparison of the environmental effects of each alternative with those of the proposed project. Table 6.R provides a summary of the alternatives analysis.

The significant unavoidable adverse impacts of the proposed project include traffic, construction air quality, long-term operational air quality effects (CO, ROC, NO<sub>x</sub>), cumulative long-term air quality effects, and cumulative project impacts associated with solid waste disposal capacity at Class III landfills. The proposed project and the alternatives addressed in this EIR would not have a significant impact upon aesthetics, biological resources, cultural and paleontological resources, geologic

resources, hazards, hydrology and water quality, land use, public services and utilities (except solid waste disposal), and noise.

## **6.3 ALTERNATIVE 1: NO PROJECT/NO DEVELOPMENT ALTERNATIVE**

### **6.3.1 Description**

Consistent with Section 15126.6 of the CEQA Guidelines, the No Project/No Development Alternative is the existing condition of the project site at the time the NOP was published. The setting of the site at the time of the NOP is described throughout Chapter 4.0 of this EIR with respect to individual environmental issues and forms the baseline of the impact assessment of the proposed project. This alternative represents the environmental conditions that would exist if no new development of any kind were to occur on site.

The No Project/No Development Alternative anticipates that the current conditions on site would not change. The project site is currently developed as an inactive “tank farm” and contains aboveground storage tanks (ASTs), aboveground and belowground pipelines, and equipment and structures associated with petroleum product storage and transfer. Tanks 1–4 were used to store fuel oil for the surrounding electric generating plants. Tanks 1 through 3 are empty, and Tank 4 contains approximately 36 inches of settled sludge collected from the bottom of all the tanks. Two additional smaller ASTs are on the site.

Under this alternative, Tanks 1 through 4 and Tank 6 would remain on site. Ancillary equipment that would also be retained on-site include a former hazardous material storage area, depressed sump area, and underground pipelines that are connected to each of the large tanks. The existing underground pipeline system connecting Tanks 1 through 4, although not currently in use, would not be formally abandoned or demolished. Since there would be no grading or construction activity with this alternative, remediation of soils necessary for site redevelopment would not occur.

The Pacific Energy receiving and pump station in the northern portion of the site would remain in place with this alternative, as with the proposed project. This pump station area consists of Tank 5, a heating unit, two cylindrical natural gas tanks, a lube oil tank, pumps, the equipment room, and associated piping. The facility occupies approximately 1.1 acres of the 17.8-acre parcel. The area around the tank would not be fenced, and access would continue to be unrestricted. Additionally, a concrete containment wall would not be constructed. The aboveground pipeline that connects Tank 5 to the Pacific Energy tanks located south of the proposed site would remain aboveground.

### **6.3.2 Attainment of Project Objectives**

The No Project/No Development Alternative would not achieve any of the Project Objectives. In the absence of new development, a conveniently located commercial retail center would not be provided. The alternative would not include design and implementation of comprehensive site development standards that minimize adverse impacts to the environment through sensitive land use planning and design features. There would be no economical reuse of the project site and no transition of the project site from an underutilized industrial site to new uses that can provide jobs and economic activities that promote economic revitalization. The No Project/No Development Alternative would



not enhance the economic vitality of the City of Long Beach and would not provide property tax, sales tax, and other revenue opportunities.

### 6.3.3 Comparison of Impacts

The No Project/No Development Alternative assumes that the existing conditions on site would remain unchanged. No additional vehicle trips would be generated by the site with the No Project/No Development Alternative. For comparison purposes, the proposed project would generate an average of 5,783 trips per weekday. The Reduced Project Alternative (Alternative 2) would generate 3,630 trips per weekday, the Warehouse Alternative (Alternative 3) would generate 4,903 trips per weekday, and the Light Industrial Alternative (Alternative 4) would generate 5,216 trips per weekday on average. Trip distribution on the street network varies for each use. The determination of significant effects is based on impacts to key intersections during the weekday and weekend peak hours. See Sections 6.4 through 6.6 for more information regarding the other alternatives to the proposed project. See Section 4.11 of this EIR for more information regarding the traffic impacts of the proposed project. The existing tank farm and Pacific Energy receiving and pump station would remain and be operated in a manner similar to the existing operations. The intersection operations associated with the No Project/No Development Alternative would be identical to the cumulative baseline intersection operations discussed in the Section 4.11, Traffic and Transportation. As presented in Section 4.11, five intersections are forecast to operate with unsatisfactory levels of service in the cumulative baseline (2006) condition (No Project/No Development Alternative). Although the following five intersections would operate with unsatisfactory levels of service, no significant traffic impacts are forecast to occur as a result of the No Project/No Development Alternative because no additional development would occur on-site.

- Studebaker Road/SR-22 westbound ramps (LOS F during the p.m. peak hour)
- Studebaker Road/2nd Street (LOS E during the a.m. and p.m. peak hours)
- PCH/7th Street (LOS F during the a.m. and p.m. peak hours)
- PCH/2nd Street (LOS E during the a.m. peak hour, LOS F during the p.m. peak hour)
- PCH/Studebaker Road (LOS F during the p.m. peak hour)

Table 6.A provides a comparison of the levels of service with the proposed project and the No Project/No Development Alternative. As shown in Table 6.A, when compared with the proposed project, all study area intersections except the intersection of Studebaker Road/Loynes Drive would operate with improved or the same level of service with implementation of the No Project/No Development Alternative. The intersection of Studebaker Road/Loynes Drive, which is also the project driveway, would operate with improved levels of service with implementation of the proposed project (compared with the No Project Alternative) because of the project design features (i.e., turn lanes and signal improvements) that are planned to be implemented at the intersection as part of the project. Because no additional vehicle trips would be generated by the existing project site, it is to be expected that levels of service at the remaining study area intersections would be better in the No Project/No Development alternative than those experienced with the proposed project.

**Table 6.A: Comparison of No Project/No Development Alternative with Proposed Project: Traffic**

	Weekday Peak Hour Conditions									
	2006 Plus Project				2006 Plus No Project Alternative				Change in ICU with No Project Alternative	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU Change	ICU Change
1. Studebaker Rd/SR-22 WB ramps <sup>1</sup>	0.725	C	<b>1.045</b>	<b>F</b>	0.711	C	1.022	F	-0.014	-0.023
2. Studebaker Rd/SR-22 EB ramps	0.626	B	0.898	D	0.608	B	0.870	D	-0.018	-0.028
3. Studebaker Rd/AES Plant driveway	0.651	B	0.849	D	0.637	B	0.819	D	-0.014	-0.030
4. Studebaker Rd/Loynes Dr	0.673	B	0.858	D	0.867	D	0.872	D	0.194	0.014
5. Studebaker Rd/2nd Street	0.975	E	<b>1.002</b>	<b>F</b>	0.965	E	0.984	E	-0.010	-0.018
6. PCH/7th Street (CMP)	1.201	F	1.313	F	1.197	F	1.306	F	-0.004	-0.007
7. PCH/Bellflower Blvd	0.715	C	0.844	D	0.707	C	0.830	D	-0.008	-0.014
8. PCH/Loynes Dr	0.753	C	0.864	D	0.730	C	0.863	D	-0.023	-0.001
9. PCH/2nd Street (CMP)	0.941	E	1.066	F	0.933	E	1.057	F	-0.008	-0.009
10. PCH/Studebaker Rd	0.896	D	1.322	F	0.895	D	1.319	F	-0.001	-0.003
11. Bixby Village Rd/Loynes Dr	0.267	A	0.438	A	0.251	A	0.413	A	-0.016	-0.025

  

	Weekend Peak Hour Conditions				
	2006 Plus Project		2006 Plus No Project Alternative		Change in ICU with No Project Alternative
					ICU Change
	ICU	LOS	ICU	LOS	
1. Studebaker Rd/SR-22 WB ramps	0.805	B	0.746	C	-0.059
2. Studebaker Rd/SR-22 EB ramps	0.732	C	0.656	B	-0.076
3. Studebaker Rd/AES Plant driveway	0.730	C	0.660	B	-0.070
4. Studebaker Rd/Loynes Dr	0.809	B	0.729	C	-0.080
5. Studebaker Rd/2nd Street	<b>0.980</b>	<b>E</b>	0.936	E	-0.044
6. PCH/7th Street (CMP)	<b>0.938</b>	<b>E</b>	0.910	E	-0.028
7. PCH/Bellflower Blvd	0.795	C	0.744	C	-0.051
8. PCH/Loynes Dr	0.840	D	0.840	D	0.000
9. PCH/2nd Street (CMP)	<b>1.020</b>	<b>F</b>	0.991	E	-0.029
10. PCH/Studebaker Rd	1.195	F	1.189	F	-0.006
11. Bixby Village Rd/Loynes Dr	0.331	A	0.290	A	-0.041

Note: Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

<sup>1</sup> Improvements to intersection included with project design.

No new air pollutant emissions would be generated by short-term construction emissions since no new construction is proposed. No short-term construction noise impacts or long-term operational noise impacts would occur to the surrounding area. The existing vegetation and wildlife on site would not be further disturbed compared with existing conditions. Existing views of and from the site would not be altered. Unknown potential subsurface archaeological and paleontological resources would remain undisturbed. No new sources of solid waste would be created by this alternative.

This alternative would avoid the project's significant effects related to traffic, construction air quality, operational air quality, and solid waste disposal.

### **6.3.4 Summary for Alternative 1**

The No Project/No Development Alternative would avoid the project-related significant effects as a result of construction air quality emissions since this alternative would not involve any grading or use of construction equipment on site. The No Project/No Development Alternative would avoid the project-related significant effects as a result of traffic and operational air emissions since no new vehicular trips or other operational sources would be generated as a result of this alternative. This alternative would also avoid the impact to solid waste facilities since there would be no new sources of solid waste.

The No Project/No Development Alternative would not achieve any of the project objectives.

## **6.4 ALTERNATIVE 2: REDUCED PROJECT ALTERNATIVE**

### **6.4.1 Description**

The Reduced Project Alternative considers the development of the project site with a reduced intensity of commercial development. Specifically, this alternative includes development of a home improvement store, but no other retail uses.

The home improvement and garden center building would consist of a 104,886-square-foot tilt-up concrete structure with exterior canopies and various architectural enhancements. The main portion of the building would have a height of 32 feet and would include an entry canopy extending above the building to a height of 39 feet. The proposed 34,643-square-foot garden center would consist of a combination screen mesh enclosure on the east side of the main building. A customer pickup canopy and a loading area consisting of four roll-up doors and a depressed loading dock would be included. At-grade loading areas would be provided for lumber and garden center deliveries. No additional development pads for restaurants or additional retail uses are included in this alternative.

The Reduced Project Alternative would have a total of 139,529 square feet of commercial space, including a 104,886-square-foot home improvement store with a 34,643-square-foot garden center. This is an 18,000-square-foot reduction compared with the proposed project. A total of 593 parking spaces are proposed for the development consistent with City of Long Beach Zoning Code requirements.

The discretionary permits required for this alternative are comparable to those needed for the proposed project and include: Local Coastal Development Permit, a Conditional Use Permit to allow

retail trade in the PD-1 zone, Site Plan Review, and Standards Variances for curb cuts and flag display. A Standards Variance for the open space requirements is not needed for this alternative, since it would incorporate the 30 percent open space requirement of PD-1 (SEADIP). Other project improvements, including lighting and sanitary sewer connection, would be essentially the same as those included in the project description for the proposed project (Chapter 3.0 of this EIR).

#### **6.4.2 Attainment of Project Objectives**

The Reduced Project Alternative would be generally consistent with the Project Objectives. This Alternative would provide a conveniently located home improvement store, but would not include other “stand-alone” retail uses. Implementation of this alternative would require City Site Plan Review; therefore, it is anticipated that it would be designed with comprehensive site development standards that may minimize design-related adverse impacts to the environment through sensitive land use planning and design features. However, in order to be economically viable, this alternative would not include the proposed project improvements/ enhancements such as a bicycle lane on Loynes Drive, pedestrian access on Loynes Drive bridge, new traffic signal coordination timing, enhanced landscaping, and a walkway/trail fronting Studebaker Road. The home improvement store would provide an economical reuse of the project site and allow for the transition of the project site from underutilized industrial property to a new use that can provide jobs and enhance the economic vitality of the City of Long Beach, providing property tax, sales tax, and other revenue opportunities, but at a lesser amount than the proposed project.

The Reduced Project Alternative would not provide the other retail amenities to serve the needs of local residents and businesses, as called for in Project Objective 1.

#### **6.4.3 Comparison of Impacts**

**Aesthetics.** Implementation of the Reduced Project Alternative would result in a substantial alteration of the visual character of the site by removing the existing tanks and constructing a home improvement store. The Reduced Project Alternative would be developed with 30 percent open space, as required by PD-1 (SEADIP), and perimeter and parking lot landscaping, as required by the Zoning Code. This represents an increase in landscaping open space area compared with the proposed project, which requires a Standards Variance from the PD-1 (SEADIP) open space requirements. The Reduced Project Alternative would therefore be characterized by less building mass and larger areas of open space than the proposed project, resulting in an overall aesthetic improvement. In addition, it is anticipated that the additional landscape treatment included in the site design for the proposed project would be implemented with this alternative as well. It is expected that the home improvement store would visually dominate the view of motorists traveling on Loynes Drive toward Studebaker Road, but that the building would visually blend into its surroundings when viewed from a significant distance and elevation. Therefore, the effect of the Reduced Project Alternative on any scenic vistas that may exist from a distant off-site area is not considered significantly adverse.

The project site boundaries are not directly adjacent to the Los Cerritos wetlands area, and the scenic quality of the wetlands would not be significantly affected by development of the project site. Studebaker Road, located adjacent to the project site, is not a designated State scenic highway. There

are no scenic rock outcroppings located within the project limits. Impacts to scenic resources in the vicinity of the project site would be considered less than significant.

The development of a home improvement store has the potential to result in light and glare effects; however, it is anticipated that outdoor lighting could be designed to prevent light spillage in excess of that which has been referenced and analyzed in this EIR for the proposed project. For example, exterior lighting could be directed downward and away from adjacent streets and adjoining land uses in a manner designed to minimize off-site spillage. A home improvement store use requires a Conditional Use Permit in the PD-1 zone; therefore, it is anticipated that there would be an opportunity to impose conditions of approval and/or to enforce mitigation measures, similar to those required for the proposed project, as a result of the discretionary approval process and the required CEQA documentation for the alternative.

**Air Quality.** Construction-related air pollutant emissions are the result of site demolition, grading, and construction activities. The Reduced Project Alternative would result in demolition and grading essentially equivalent to what is required for the proposed project. This alternative would result in reduced building square footage and would require slightly less construction activity than the proposed project. The significant impacts associated with short-term emissions from the proposed project are primarily the result of earth movement and the use of grading equipment. Therefore, although reduced construction activities would be required for this alternative, the comparable level of demolition and grading indicates that short-term emissions may be incrementally but not significantly less than the proposed project. Similar levels of emissions reductions would be achieved by the dust-control measures required by SCAQMD and summarized in the mitigation measures for the proposed project. Since the amount of demolition and grading required for this alternative is similar to that required for the proposed project, comparable dust-control measures can be assumed to have approximately the same effect to reduce short-term emissions as they would with the proposed project.

Long-term air emissions are associated with the operation of the project, including vehicular emissions and stationary source emissions. As illustrated in Table 6.B, operational air emissions are slightly less for this alternative compared with the proposed project. While the significant effects of the proposed project include regional CO, ROC, and NO<sub>x</sub> emissions, the Reduced Project Alternative would create significant effects for regional CO and NO<sub>x</sub> emissions, but not ROC. However, both the proposed project and the Reduced Project Alternative would result in significant project and cumulative long-term operational air quality impacts. The mitigation measures included for the proposed project could also be assumed for this alternative; however, these measures reduce energy consumption and therefore do not reduce the majority of the operational emissions resulting from vehicular traffic generated by the project. Therefore, it is reasonable to assume that for this alternative, as well as for the proposed project, mitigation would not substantially reduce the significant, long-term operational regional air quality impacts. Neither the proposed project nor the Reduced Project Alternative result in a significant impact related to local CO hotspot concentrations (Tables 6.C and 6.D).

**Table 6.B: Operational Emissions—Alternatives Comparison**

Emission Source	Daily Emission Rates (lbs/day)				
	CO	ROC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>
<b>Alternative 2: Reduced Project</b>					
Weekday					
Reduced Project	390	31	53	0.34	31
<b>Change from Proposed Project</b>	<b>-299</b>	<b>-23</b>	<b>-40</b>	<b>-0.2</b>	<b>-19</b>
Weekend					
Reduced Project	597	47	82	0.52	47
<b>Change from Proposed Project</b>	<b>-415</b>	<b>-33</b>	<b>-54</b>	<b>-0.27</b>	<b>-25</b>
<b>Alternative 3: Warehouse</b>					
Weekday					
Warehouse	96	12	25	0.19	7.7
<b>Change from Proposed Project</b>	<b>-593</b>	<b>-42</b>	<b>-68</b>	<b>-0.34</b>	<b>-42</b>
Weekend					
Warehouse	96	12	25	0.19	7.7
<b>Change from Proposed Project</b>	<b>-916</b>	<b>-68</b>	<b>-111</b>	<b>-0.6</b>	<b>-65</b>
<b>Alternative 4: Light Industrial</b>					
Weekday					
Light Industrial	804	59	111	0.74	63
<b>Change from Proposed Project</b>	<b>115</b>	<b>4.6</b>	<b>18</b>	<b>0.21</b>	<b>13</b>
Weekend					
Light Industrial	153	16	22	0.14	12
<b>Change from Proposed Project</b>	<b>-859</b>	<b>-64</b>	<b>-114</b>	<b>-0.65</b>	<b>-60</b>
<b>SCAQMD Threshold</b>	<b>550</b>	<b>55</b>	<b>55</b>	<b>150</b>	<b>150</b>
<b>Reduced Project Exceed?<sup>1</sup></b>	<b>No/Yes</b>	<b>No/No</b>	<b>No/Yes</b>	<b>No/No</b>	<b>No/No</b>
<b>Warehouse Exceed?</b>	<b>No/No</b>	<b>No/No</b>	<b>No/No</b>	<b>No/No</b>	<b>No/No</b>
<b>Light Industrial Exceed?</b>	<b>Yes/No</b>	<b>Yes/No</b>	<b>Yes/No</b>	<b>No/No</b>	<b>No/No</b>

Source: LSA Associates, Inc., January 2005.

<sup>1</sup> Exceedances are noted for weekday/weekend.

**Table 6.C: 2006 Weekday CO Concentrations Changes from Proposed Project<sup>1</sup>**

<b>Intersection</b>	<b>Warehouse Alternative Change 1-hr/8-hr (ppm)</b>	<b>Reduced Project Alternative Change 1-hr/8-hr (ppm)</b>	<b>Light Industrial Alternative Change 1-hr/8-hr (ppm)</b>
PCH & 2nd St.	-0.3 / -0.2	-0.3 / -0.2	-0.3 / -0.2
	-0.2 / -0.1	-0.2 / -0.1	-0.2 / -0.1
	-0.1 / 0.0	-0.1 / 0.0	-0.1 / 0.0
	-0.1 / -0.1	-0.1 / -0.1	-0.1 / -0.1
PCH & Loynes Dr.	0.0 / 0.0	0.0 / 0.0	-0.1 / -0.1
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
PCH & Bellflower Blvd.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
PCH & 7th St.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
PCH & Studebaker Rd.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
Bixby Village & Loynes Dr.	-0.1 / 0.0	-0.1 / 0.0	-0.1 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
Studebaker Rd. & Loynes Dr.	0.4 / 0.3	0.4 / 0.3	0.3 / 0.2
	0.4 / 0.3	0.3 / 0.2	0.3 / 0.2
	0.4 / 0.2	0.3 / 0.2	0.3 / 0.2
	0.4 / 0.2	0.3 / 0.2	0.3 / 0.2
Studebaker Rd. & SR-22 EB Ramps	0.0 / 0.0	-0.1 / -0.1	-0.1 / -0.1
	0.0 / 0.0	-0.1 / -0.1	-0.1 / -0.1
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
Studebaker Rd. & SR-22 WB Ramps	0.0 / 0.0	-0.1 / -0.1	-0.1 / -0.1
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	-0.1 / -0.1	-0.1 / -0.1
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
Studebaker Rd. & 2nd St.	-0.6 / -0.4	-0.6 / -0.4	-0.6 / -0.4
	-0.5 / -0.4	-0.5 / -0.4	-0.5 / -0.4
	-0.4 / -0.3	-0.4 / -0.3	-0.5 / -0.3
	-0.4 / -0.2	-0.4 / -0.2	-0.4 / -0.2
Studebaker Rd. & AES Plant Driveway	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	-0.1 / 0.0	-0.1 / 0.0
	0.1 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0

Source: LSA Associates, Inc., January 2005.

<sup>1</sup> Includes ambient one-hour concentration of 5.9 ppm and ambient eight-hour concentration of 4.6 ppm. Measured at the 3648 North Long Beach Boulevard, Long Beach, CA, AQ Station (Los Angeles County).

**Table 6.D: 2006 Weekend CO Concentrations Changes from Proposed Project<sup>1</sup>**

<b>Intersection</b>	<b>Warehouse Alternative Change 1-hr/8-hr (ppm)</b>	<b>Reduced Project Alternative Change 1-hr/8-hr (ppm)</b>	<b>Light Industrial Alternative Change 1-hr/8-hr (ppm)</b>
PCH & 2nd St.	-0.7 / -0.5	-0.2 / -0.1	-0.7 / -0.5
	-0.7 / -0.5	-0.2 / -0.2	-0.7 / -0.5
	-0.6 / -0.4	-0.1 / -0.1	-0.6 / -0.4
	-0.6 / -0.4	-0.1 / -0.1	-0.6 / -0.4
PCH & Loynes Dr.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
PCH & Bellflower Blvd.	-0.1 / -0.1	0.0 / 0.0	-0.1 / -0.1
	0.0 / 0.0	0.0 / 0.0	-0.1 / 0.0
	0.0 / 0.0	0.0 / 0.0	-0.1 / 0.0
	-0.1 / 0.0	0.0 / 0.0	-0.1 / 0.0
PCH & 7th St.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	-0.1 / -0.1	0.0 / 0.0	-0.2 / -0.2
	0.0 / 0.0	0.0 / 0.0	-0.1 / -0.1
PCH & Studebaker Rd.	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0
	-0.1 / -0.1	0.0 / 0.0	-0.1 / -0.1
	-0.1 / 0.0	0.0 / 0.0	-0.1 / 0.0
Bixby Village & Loynes Dr.	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.1
	-0.1 / 0.0	0.0 / 0.0	-0.1 / 0.0
	-0.1 / 0.0	0.0 / 0.0	-0.1 / 0.0
	-0.1 / 0.0	0.0 / 0.0	-0.1 / 0.0
Studebaker Rd. & Loynes Dr.	-0.1 / -0.1	-0.2 / -0.1	-0.4 / -0.3
	-0.1 / 0.0	-0.3 / -0.2	-0.3 / -0.2
	-0.1 / 0.0	-0.3 / -0.2	-0.4 / -0.2
	-0.2 / -0.1	-0.3 / -0.2	-0.4 / -0.2
Studebaker Rd. & SR-22 EB Ramps	-0.1 / -0.1	0.0 / 0.0	-0.2 / -0.2
	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.2
	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.1
	0.0 / 0.0	0.0 / 0.0	-0.1 / 0.0
Studebaker Rd. & SR-22 WB Ramps	-0.3 / -0.2	-0.3 / -0.2	-0.3 / -0.2
	-0.3 / -0.2	-0.2 / -0.1	-0.3 / -0.2
	-0.3 / -0.2	-0.2 / -0.1	-0.3 / -0.2
	-0.2 / -0.1	-0.2 / -0.1	-0.3 / -0.2
Studebaker Rd. & 2nd St.	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.2
	-0.1 / 0.0	-0.1 / 0.0	-0.2 / -0.1
	-0.1 / -0.1	0.0 / 0.0	-0.1 / -0.1
	-0.1 / 0.0	-0.1 / 0.0	-0.2 / -0.1
Studebaker Rd. & AES Plant Driveway	-0.1 / -0.1	0.0 / 0.0	-0.1 / -0.1
	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.2
	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.2
	-0.1 / -0.1	-0.1 / -0.1	-0.2 / -0.2

Source: LSA Associates, Inc., January 2005.

<sup>1</sup> Includes ambient one-hour concentration of 5.9 ppm and ambient eight-hour concentration of 4.6 ppm. Measured at the 3648 North Long Beach Boulevard, Long Beach, CA, AQ Station (Los Angeles County).



**Biological Resources.** The following project impacts to biological resources were analyzed and found to be less than significant: impacts to sensitive plant species, sensitive wildlife species, wildlife movement corridors, jurisdictional wetlands, and adopted ordinances, plans, and policies. The grading limits and development limits for the Reduced Project Alternative are the same as for the proposed project; therefore, the impacts to these identified biological resources would be less than significant for this alternative.

The project was found to have a potentially significant impact to streambeds and waters of the U.S. The Reduced Project Alternative would result in the same impact as a result of the necessary grading and earth movement to redevelop the site. As described above, the Reduced Project Alternative would require a CUP to authorize retail use in an industrial zone as well as other discretionary permits. Therefore, it is assumed that through the discretionary permit approval and CEQA documentation processes, implementation of Mitigation Measure 4.3-1 could be required. This mitigation measure would be sufficient to reduce potential impacts to jurisdictional waters to a less than significant level because the potential impact is the result of grading activity, which is the same for the proposed project and this alternative.

The jurisdictional delineation for the site identified the limits of both potential Corps nonwetland waters of the U.S. and CDFG streambed jurisdiction at the Los Cerritos Channel just north of the Loynes Drive bridge. Sewer line construction across the Los Cerritos Channel would occur above and outside potential jurisdictional limits, and the installation of the sewer line would not include any work within the channel itself. The potential for impacts to the Los Cerritos Channel, such as incidental discharge of fill, would be the result of grading activity, which is the same for the proposed project and for this alternative. Therefore, implementation of precautionary protective barriers as described in Mitigation Measure 4.3-1 would prevent any incidental discharge of fill, debris, or other material into the Los Cerritos Channel and the two adjacent water supply channels and would reduce potential impacts to jurisdictional waters to less than significant levels for both the proposed project and the Reduced Project Alternative. Therefore, for all of the build alternatives, the construction of the sewer line would not impact jurisdictional areas and would not be subject to agency jurisdiction.

**Cultural and Paleontological Resources.** The project impacts to historical resources were analyzed and found to be less than significant. The existing tanks on site were not found to be distinctive in their design, are not associated with events of significance, and are not likely to yield important historic information; therefore, they and the Alamitos Tank Farm as a whole are not considered important cultural resources as defined by CEQA and not eligible for listing on the California Register of Historical Resources. Therefore, neither the proposed project nor the Reduced Project Alternative would have a significant effect on historic resources, and no mitigation is required for impacts to historical resources on site.

Potential impacts to paleontological resources and archaeological and prehistoric resources were analyzed. It was determined that it is unlikely that *in situ* deposits of fossiliferous sediments would be encountered during project construction. However, since there is a potential to encounter unknown paleontological resources during excavation activities, Mitigation Measure 4.4-1 was included to address potential impacts with regard to paleontological resources that may be discovered. Similarly, it was determined that there is no evidence of prehistoric use of the project site. Because the project area was originally tidal marshland, there is little potential for buried prehistoric resources, and no

prehistoric resources have been previously recorded within 0.5 mile of the project area. However, since there is the possibility that human remains may be encountered during excavation activities, Mitigation Measure 4.4-2 was included to address this issue.

The grading limits and development limits for the Reduced Project Alternative are the same as for the proposed project; therefore, the potential project and cumulative impacts to the cultural and paleontological resources would be essentially the same for this alternative, and Mitigation Measures 4.4-1 and 4.4-2 would apply. These measures require monitoring so that in the unlikely event that resources are uncovered, they would be appropriately protected. Both project and cumulative impacts to the cultural and paleontological resources would be less than significant with mitigation for the Reduced Project Alternative.

**Geology and Soils.** The project impacts to shrinkage and subsidence were analyzed and found to be less than significant. The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction. No oil exploration has been reported at the site specifically, although the site is located within the limits of the greater Seal Beach Oil Field (MISSION 2004). Known ground subsidence associated with oil withdrawal was recorded in the Wilmington area, approximately 8 miles west of the site. Any historic land subsidence in the site area has been since minimized as a result of freshwater injection through the operations of the Los Alamitos Barrier Project, which is located near the site. Thus, the potential site constraint associated with land subsidence is considered low, and no mitigation is required for either the proposed project or the Reduced Project Alternative.

The geologic analysis for the project identified several potentially significant geologic effects, including: seismic considerations, erosion potential, liquefaction, lateral spreading, expansive soils, and site preparation. This alternative would result in comparable grading and building activity on the project site and slightly less but similar building mass. Therefore, comparable geologic mitigation measures would apply. These project impacts are reduced to below a level of significance for both the proposed project and the Reduced Project Alternative with the implementation of Mitigation Measures 4.5-1 to 4.5-3.

**Hazards and Hazardous Materials.** There is the potential for significant hazardous substances impacts with implementation of the project during the construction and operation phases of the project. Risks associated with demolition, grading, and construction are essentially the same for the proposed project and the Reduced Project Alternative, since the grading limits are the same.

**Demolition and Construction.** Potential risks associated with demolition, grading, and construction include:

- Improper handling of the ASTs, pipeline conveyance systems, and their contents
- Improper handling of asbestos, lead-based paint, and PCBs in structures proposed for demolition

- Potential to disturb Tank No. 5 and supporting equipment that would remain in a 1.1-acre area in the northern portion of the site
- Detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment
- Methane
- Routine use of hazardous materials such as fuels, paints, and solvents during project construction.

However, most of these activities are subject to specific local, State, and federal regulations, and compliance with these regulations is considered adequate to address potential impacts. Therefore, implementation of Mitigation Measures 4.6.1 through 4.6.9 would reduce potential impacts from demolition, grading, and construction activities to less than significant levels for both the Proposed Project and the Reduced Project Alternative. Completion of a detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater are required to prevent significant impacts to human health or the environment. Methane was found in shallow soils above regulatory levels during a preliminary methane soil gas investigation. In order to delineate methane concentrations, a methane soil gas investigation is necessary after rough grading and prior to building construction and utility installation. This method of testing is appropriate because methane concentrations and methane migration would likely change during grading and site preparation. The project applicant would also be required to implement standard best management practices with regard to hazardous materials use during construction. Mitigation Measures 4.6.1 through 4.6.6, 4.7.1, and 4.7.2 would reduce potential significant hazardous substances impacts associated with demolition, grading, excavation, and construction of the project to less than significant levels.

**Operation.** It is assumed that the Reduced Project Alternative would utilize, store, and sell hazardous materials such as solvents, paints, and pesticides at quantities comparable to the proposed project. BMPs are required to prevent pollutants from discharging into the storm drain system from the proposed development and in particular from the outdoor garden center (refer to Section 4.7, Hydrology and Water Quality). All businesses in the City of Long Beach that utilize hazardous materials above State thresholds are required to submit a Hazardous Materials Release Response Plan and Inventory to the Long Beach/Signal Hill CUPA for review and approval (Municipal Code, Chapter 8.86). Implementation of BMPs and compliance with local, State, and federal regulations regarding hazardous materials use and storage are considered adequate to address these potential hazards. Therefore, Mitigation Measures 4.6.7 and 4.7.4 would reduce potential impacts regarding use and storage of hazardous materials during operation of the Reduced Project Alternative to less than significant levels.

The project site is located near the AES Alamitos electrical generating plant. The plant uses a 29 percent ammonium hydroxide solution in its units for air pollution control purposes as well as other hazardous materials in its day-to-day operations.<sup>1</sup> The hazards associated with hazardous materials present at the AES facility include those commonly associated with the handling of lubricating oils, caustics, and oxidizers. Precautions against these hazards are set forth in the

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<sup>1</sup> Telephone conversation with Steve Maghy, AES Environmental Manager, June 1, 2004.

plant's California ARP required Risk Management Plan. Because the project would provide public receptors directly adjacent to the plant, revisions to the AES facility's Risk Management Plan and Emergency Procedures may be required. Compliance with local, State, and federal regulations regarding risk management and emergency response is considered adequate to address these potential hazards. Therefore, Mitigation Measure 4.6.8 would reduce potential impacts from operations or emergencies at the AES facility to less than significant levels.

As stated above, the Pacific Energy-owned and operated Tank No. 5 and its associated equipment and pipelines would remain on site. There is the potential for the proposed project to inhibit access to these facilities in the event of an emergency. In addition, the Hazardous Materials Release Response Plan for this distribution system would require revisions to accommodate the relocated pipelines. Compliance with local, State, and federal regulations regarding release/spills and emergency response is considered adequate to address this potential hazard. Therefore, implementation of Mitigation Measure 4.6.9 would reduce potential emergency response impacts related to these existing facilities to less than significant levels.

After construction and during ongoing operation of the project, methane could occur in elevated concentrations in subsurface soils at the site. The State has specified design features to prevent accumulation of methane in buildings. As mentioned above, these design features are subject to approval by the City of Long Beach Fire Department during final design. Implementation of Mitigation Measure 4.6.5 would reduce potential methane impacts with project operation to less than significant levels.

There are no schools within one-quarter mile of the project site. Kettering Elementary School is located within one-half mile of the project site, and Hill Middle School is within one mile of the project site. Compliance with the identified mitigation measures would ensure that any hazardous emissions or handling of hazardous substances or materials would not result in a significant impact to the surrounding area, including the proposed project.

**Hydrology and Water Quality.** The project site is not located within an area that is used for groundwater production, and neither the proposed project nor any of the alternatives would have a significant effect on groundwater supply. The project site is located in Zone X, which is outside of the 100-year flood hazard area.<sup>1</sup> Therefore, implementation of the project or the Reduced Project Alternative would not place structures within a 100-year flood hazard area that would impede or redirect flood flows, and no mitigation is required.

The site is subject to inspection by the RWQCB and the City during construction (General Construction Activity Permit and Municipal Code, respectively). Implementation of BMPs as described for the Reduced Project Alternative in Section 4.7 of this EIR and as described in Mitigation Measures 4.7.1, 4.7.2, and 4.7.3, would reduce potential waste discharge and water quality violations related to runoff during construction to less than significant levels.

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<sup>1</sup> Mission GeoScience, Inc., *Engineering Geologic & Geohazards Assessment Report, Long Beach Home Depot, 400 Studebaker Road, Long Beach, California*. December 2004 (Appendix E).

Table 4.7.E lists the operational BMPs required by the City of Long Beach under the Municipal NPDES Permit for priority development projects, including the Reduced Project Alternative. Treatment Control BMPs would be incorporated into the design of the on-site storm drain system to treat project runoff in accordance with the SUSMP standards.

In order to comply with waste discharge requirements, a SUSMP would be prepared for the Reduced Project Alternative that would target control of pollutants in runoff typically produced by that land use (e.g., bacteria and viruses; nutrients; trash; oil and grease; sediment, dissolved solids, hydrocarbons, and pesticides; Table 4.7.A). In order to comply with water quality standards and prevent further degradation of water quality, the SUSMP for this alternative would address pollutants that have impaired receiving waters for the project as applicable (i.e., bacteria, ammonia, metals, pesticides, and nutrients [for algae]; Section 4.7.2). Consistent with Mitigation Measure 4.7.4, implementation of a project SUSMP that addresses these pollutants of concern to the maximum extent practicable would be required to reduce potential water quality impacts to a less than significant level.

Water quality modeling and calculations were conducted for the proposed project and indicated that pollutant concentrations in runoff would be lower with implementation of the proposed project compared with the existing conditions if Source Control and Treatment BMPs are implemented. This alternative would result in developed conditions, including open space, structures, and pavement, that are similar to the proposed project; therefore, similar water quality features would be required to reduce potential pollutants in surface water runoff. If this alternative incorporated comparable runoff water quality source controls, Treatment BMPs, and general project design, consistent with Mitigation Measures 4.7.4 through 4.7.6, then potential operational water quality impacts would be less than significant for this alternative as well.

A hydrology plan would be required for the Reduced Project Alternative at the time building permit applications are submitted to the City. The hydrology requirements would be similar to those required for the proposed project, since the postgrading drainage conditions would be essentially the same. It is anticipated that the site design would not substantially alter the drainage pattern of the site, cause substantial erosion, or exceed the capacity of existing drainage systems.

**Land Use.** The project site is located between the Los Cerritos Channel and the San Gabriel River. The land use patterns around the project site have been established with industrial land uses to the north, south, and east, and residential land uses beyond Los Cerritos Channel to the west. An infill commercial-retail project such as the Reduced Project Alternative would be generally consistent with nearby uses. Required setbacks and landscaping, as well as the distance between residential areas and the proposed project site (approximately 550 feet) indicate that potential impacts to residential uses west of the Los Cerritos Channel are minimized.

This alternative would result in an infill development on a parcel within an established urban community. The home improvement store contemplated in the Reduced Project Alternative requires a Conditional Use Permit in Subarea 19 of the PD-1 zoning district (which incorporates the IG General Industrial district land use and development standards) and other discretionary actions as described above. No General Plan Amendment or zone change would be required. Both the proposed project

and the Reduced Project Alternative would result in the loss of 16.7 acres from the City's inventory of potential industrial land; however, this impact was determined to be less than significant.

Short-term effects of the Reduced Project Alternative would be comparable to those of the proposed project and would occur as a result of demolition of the existing on-site tanks, site grading, and construction activity for on-site and off-site improvements. These activities would result in short-term air quality effects as described in Section 4.2, short-term noise effects as described in Section 4.9, and short-term traffic effects as described in Section 4.11. None of the surrounding land uses would experience short-term effects outside those described in those sections. Short-term noise effects are less than significant with compliance with the City's Noise Ordinance.

The extension of the sewer line across Studebaker Road and the bridge on Loynes Drive to the nearest connection point on Vista Street would be required for this alternative, as for the proposed project, and would also result in short-term construction impacts. The force main would run underground to the Loynes Drive bridge, be mounted on and across the bridge, and then continue underground in the street to a connection point on Vista Street. There the force main would connect with an existing 8-inch line maintained by the Long Beach Water Department. The land use effects of the extension are short-term construction impacts. An encroachment permit would be needed from the City of Long Beach for construction in City roadways, and a separate encroachment permit would be needed from the County of Los Angeles Flood Control District for construction in the Los Cerritos Channel. (Refer to Figure 3.6, Sewer Line Extension.)

Street improvements and extension of the sewer line may have short-term traffic and noise impacts on adjoining properties. The adjoining properties are primarily residential uses that would experience noise from demolition and construction equipment as the installation progresses. It is estimated that pipe installation would be accomplished over a one-month time period, with the actual time adjacent or close to a particular property minimized. Construction activities would be required to adhere to the City's ordinance (see Section 4.9) for noise control (Long Beach Municipal Code Chapter 8.80), and access to individual residences would not be restricted. Therefore, short-term noise impacts to each adjoining property would be brief and below a level of significance.

The Reduced Project Alternative would result in an infill development on a parcel within an established urban community. Implementation of this alternative would result in a change in land use of the property from a low-intensity storage tank facility to a commercial home improvement store. The Reduced Project Alternative would not be inconsistent with the requirements of PD-1 since the 30 percent usable open space requirement would be met. Potential adverse effects of this alternative include the loss of 16.7 acres from the City's inventory of potential industrial land. Potential impacts associated with the loss of 16.7 acres from the City's inventory of potential industrial land are less than significant and do not require mitigation.

**Noise.** Construction-related noise is the result of site demolition, grading, and construction activities. The Reduced Project Alternative would result in demolition and grading equivalent to what is required for the proposed project. This alternative would result in reduced building square footage and would require less construction activity than the proposed project. Therefore, noise from demolition and grading would be comparable to the proposed project. Noise from construction activity may occur for a slightly shorter period of time, since the Reduced Project results in less

building area compared with the proposed project. Compliance with the City's Noise Ordinance (Long Beach Municipal Code Chapter 8.80) is assumed for the proposed project and for all of the build alternatives. Mitigation Measure 4.9.2, limiting the hours of construction in accordance with the City of Long Beach's standards, would be applied to this alternative. Thus, no construction activities would be permitted outside of the specified hours. There are no significant short-term noise effects related to the proposed project or any of the alternatives.

Long-term noise effects are associated with the operation of the project, including vehicular emissions and stationary source emissions. This alternative would result in fewer trips than the proposed project. Operational noise levels from traffic were calculated for this alternative and would not be appreciably different for this alternative compared with the proposed project. Neither the proposed project nor the Reduced Project Alternative result in a significant operational noise impact.

**Public Services and Utilities.** There is an existing identified long-term capacity shortfall at waste disposal facilities in Los Angeles County, as described in Section 4.10 of the EIR. The Reduced Project Alternative would generate approximately 42.8 tons of solid waste each year. While this is less than what would be generated by the proposed project, it represents a contribution to a potential cumulative shortfall of committed landfill area in Los Angeles County. While waste reduction measures could be implemented for this alternative, they would not be sufficient to address subregional landfill capacity issues in the long-term. Therefore, cumulative impacts of the Reduced Project Alternative associated with solid waste disposal capacity at Class III landfills would be significant and unavoidable.

All other potential impacts to public services and utilities are anticipated to be less than significant. See Section 4.10 for more information.

**Transportation and Circulation.** The trip generation associated with the Reduced Project Alternative is shown in Table 6.E. The Reduced Project Alternative includes the proposed home improvement store, but no supporting retail/restaurant land uses. The trip generation associated with the Reduced Project Alternative is forecast to generate 2,153 fewer daily trips, 96 fewer a.m. peak-hour trips, 165 fewer p.m. peak-hour trips, and 294 fewer weekend peak-hour trips. This alternative would generate fewer weekly trips than the proposed project and the Existing Zoning/Warehouse Alternative. The Reduced Project Alternative results in a greater number of weekend trips than both the existing zoning alternatives (Warehouse and Light Industrial Alternatives).

Trips generated by the Reduced Project Alternative were distributed to the study area intersections using the same trip distribution as the proposed project. The trip distribution is discussed in Section 4.11, Traffic and Transportation. Levels of service at the study area intersections were calculated for the Reduced Project Alternative in the 2006 weekday and weekend conditions.

Table 6.F compares the weekday intersection levels of service for the Reduced Project Alternative and the cumulative baseline 2006 condition. As shown in Table 6.F, although five intersections would continue to operate with unsatisfactory levels of service (LOS E or worse) with the Reduced Project Alternative, the project would not significantly impact any study area intersections during the weekday peak hour.

**Table 6.E: Reduced Project Alternative Trip Generation**

Land Use	Size	Units	ADT	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rate¹									
Home Improvement Store		TSF	29.80	0.65	0.55	1.20	1.15	1.30	2.45
Trip Generation									
Home Improvement	140	TSF	4,172	91	77	168	161	182	343
Pass-By Trips Reduction²			-542	-14	-12	-25	-40	-46	-86
Total Home Improvement Store			3,630	77	65	143	121	136	257
Proposed Project³			5,783	131	108	239	206	216	422
Change in Trips from Project			-2,153	-54	-43	-96	-85	-80	-165

Land Use	Size	Units	ADT	Weekend Peak Hour		
				In	Out	Total
Trip Rates <sup>1</sup>						
Home Improvement Store		TSF	1.86	0.39	0.39	0.77
Trip Generation						
Home Improvement	140	TSF	6,394	401	355	756
Pass-By Trips Reduction <sup>2</sup>			-831	-52	-46	-98
Total Home Improvement Store			5,563	349	309	658
Proposed Project <sup>3</sup>			8,503	513	439	952
Change in Trips from Project			-2,940	-164	-130	-294

Notes: TSF = thousand square feet

<sup>1</sup> Trip rates referenced in the Institute of Transportation Engineers, *Trip Generation*, 7th Edition (2003), Land Use Code 862 (Home Improvement Superstore).

<sup>2</sup> Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trip reduction factors of 13 percent for daily trips, 15 percent for a.m. peak hour, and 25 percent for p.m. peak hour were referenced from "pass-by" surveys for the Huntington Beach Home Depot store by Barton-Aschman Associates, Inc. (February 6, 1996)

<sup>3</sup> Project Trip Generation from Section 4.11, Traffic and Transportation.



**Table 6.F: 2006 Plus Reduced Project Alternative Weekday Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions				2006 Plus Reduced Project Alternative				Change in ICU		Exceeds City Significance Threshold	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	AM	PM
1	Studebaker Rd/SR-22 WB ramps	0.711	C	1.022	F	0.719	C	1.036	F	0.008	0.014	N	N
2	Studebaker Rd/SR-22 EB ramps	0.608	B	0.870	D	0.619	B	0.887	D	0.011	0.017	N	N
3	Studebaker Rd/AES Plant driveway	0.637	B	0.819	D	0.645	B	0.838	D	0.008	0.019	N	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.867	D	0.872	D	0.662	B	0.846	D	-0.205	-0.026	N	N
5	Studebaker Rd/2nd Street	0.965	E	0.984	E	0.971	E	0.995	E	0.006	0.011	N	N
6	PCH/7th Street (CMP)	1.197	F	1.306	F	1.200	F	1.311	F	0.003	0.005	N	N
7	PCH/Bellflower Blvd	0.707	C	0.830	D	0.712	C	0.838	D	0.005	0.008	N	N
8	PCH/Loynes Dr	0.730	C	0.863	D	0.744	C	0.864	D	0.014	0.001	N	N
9	PCH/2nd Street (CMP)	0.933	E	1.057	F	0.938	E	1.062	F	0.005	0.005	N	N
10	PCH/Studebaker Rd	0.895	D	1.319	F	0.895	D	1.321	F	0.000	0.002	N	N
11	Bixby Village Rd/Loynes Dr	0.251	A	0.413	A	0.257	A	0.429	A	0.006	0.016	N	N

Notes:

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.

Table 6.G compares the weekend intersection levels of service for the Reduced Project Alternative and the 2006 baseline condition. As shown in Table 6.G, the following two intersections would be significantly impacted during the weekend peak hour with implementation of the Reduced Project Alternative:

- Studebaker Road/2nd Street
- PCH/2nd Street

When compared to the project impact analysis, the Reduced Project Alternative would result in two fewer significant impacts during the weekday peak hours and one fewer impact in the weekend peak hour. The intersections of Studebaker Road/SR-22 westbound ramps and Studebaker Road/2nd Street would be significantly impacted by the project in the weekday peak hour, but would not experience significant impacts with the Reduced Project Alternative. During the weekend peak hour, the intersection of PCH/7th Street is significantly impacted with the proposed project, but would not be significantly impacted with the Reduced Project Alternative.

Table 6.H provides a comparison of the levels of service with the proposed project and with the Reduced Project Alternative. As shown in Table 6.H, when compared with the proposed project, all study area intersections would operate with an improved or the same level of service with implementation of the Reduced Project Alternative. This is to be expected, as the trip generation of the Reduced Project Alternative is less than the proposed project trip generation for both the weekday and weekend peak hours.

#### **6.4.4 Summary for Alternative 2**

The Reduced Project Alternative would not avoid the significant unavoidable adverse impacts of the proposed project related to construction air quality and cumulative project impacts associated with solid waste disposal capacity at Class III landfills. The Reduced Project Alternative would reduce but not avoid significant project-related impacts to traffic and operational air quality.

The trip generation of the Reduced Project Alternative is less than the proposed project trip generation for both the weekday and weekend peak hours. The Reduced Project Alternative would result in two fewer significantly impacted intersections during the weekday peak hours and one fewer impacted intersection in the weekend peak hour. All study area intersections would operate with an improved or the same level of service with implementation of the Reduced Project Alternative compared with the proposed project.

The Reduced Project Alternative is generally consistent with the project objectives; however, this alternative would not provide the other retail amenities to serve the needs of local residents and businesses, as called for in Project Objective 1. In order to meet Project Objective 3, the Reduced Project Alternative would not include the improvements/enhancements proposed for the project (refer to Section 6.4.2).

**Table 6.G: 2006 Plus Reduced Project Alternative Weekend Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions		2006 Plus Reduced Project Alternative Weekend Conditions		Change In ICU	Exceeds City Significance Threshold
		Weekend Peak Hour		Weekend Peak Hour			
		ICU	LOS	ICU	LOS		
1	Studebaker Rd/SR-22 WB ramps	0.746	C	0.786	C	0.040	N
2	Studebaker Rd/SR-22 EB ramps	0.656	B	0.710	C	0.054	N
3	Studebaker Rd/AES Plant driveway	0.660	B	0.707	C	0.047	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.729	C	0.752	C	0.023	N
5	Studebaker Rd/2nd Street	0.936	E	0.966	E	0.030	Y
6	PCH/7th Street (CMP)	0.910	E	0.928	E	0.018	N
7	PCH/Bellflower Blvd	0.744	C	0.780	C	0.036	N
8	PCH/Loynes Dr	0.840	D	0.840	D	0.000	N
9	PCH/2nd Street (CMP)	0.991	E	1.011	F	0.020	Y
10	PCH/Studebaker Rd	1.189	F	1.193	F	0.004	N
11	Bixby Village Rd/Loynes Dr	0.290	A	0.320	A	0.030	N

Notes:

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.

**Table 6.H: Comparison of Reduced Project Alternative with Proposed Project**

Intersection	Weekday Peak Hour Conditions									
	2006 Plus Project				2006 Plus Reduced Project Alternative				Change in ICU with Reduced Project Alternative	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU Change	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.725	C	<b>1.045</b>	<b>F</b>	0.719	C	1.036	F	-0.006	-0.009
2. Studebaker Rd/SR-22 EB ramps	0.626	B	0.898	D	0.619	B	0.887	D	-0.007	-0.011
3. Studebaker Rd/AES Plant driveway	0.651	B	0.849	D	0.645	B	0.838	D	-0.006	-0.011
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.673	B	0.858	D	0.662	B	0.846	D	-0.011	-0.012
5. Studebaker Rd/2nd Street	0.975	E	<b>1.002</b>	<b>F</b>	0.971	E	0.995	E	-0.004	-0.007
6. PCH/7th Street (CMP)	1.201	F	1.313	F	1.200	F	1.311	F	-0.001	-0.002
7. PCH/Bellflower Blvd	0.715	C	0.844	D	0.712	C	0.838	D	-0.004	-0.006
8. PCH/Loynes Dr	0.753	C	0.864	D	0.744	E	0.864	D	-0.009	0.000
9. PCH/2nd Street (CMP)	0.941	E	1.066	F	0.938	E	1.062	F	-0.003	-0.004
10. PCH/Studebaker Rd	0.896	D	1.322	F	0.895	D	1.321	F	-0.001	-0.001
11. Bixby Village Rd/Loynes Dr	0.267	A	0.438	A	0.257	A	0.429	A	-0.010	-0.009

Intersection	Weekend Peak Hour Conditions				
	2006 Plus Project		2006 Plus Reduced Project Alternative		Change in ICU with Reduced Project Alternative
	ICU	LOS	ICU	LOS	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.805	B	0.786	C	-0.019
2. Studebaker Rd/SR-22 EB ramps	0.732	C	0.710	C	-0.022
3. Studebaker Rd/AES Plant driveway	0.730	C	0.707	C	-0.023
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.809	B	0.752	C	-0.057
5. Studebaker Rd/2nd Street	<b>0.980</b>	<b>E</b>	<b>0.966</b>	<b>E</b>	-0.014
6. PCH/7th Street (CMP)	<b>0.938</b>	<b>E</b>	0.928	E	-0.010
7. PCH/Bellflower Blvd	0.795	C	0.780	C	-0.015
8. PCH/Loynes Dr	0.840	D	0.840	D	0.000
9. PCH/2nd Street (CMP)	<b>1.020</b>	<b>F</b>	<b>1.011</b>	<b>F</b>	-0.009
10. PCH/Studebaker Rd	1.195	F	1.193	F	-0.002
11. Bixby Village Rd/Loynes Dr	0.331	A	0.320	A	-0.011

Note: Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

<sup>1</sup>Improvements to intersection included with project design.

## 6.5 ALTERNATIVE 3: EXISTING ZONING/WAREHOUSE

### 6.5.1 Description

The Warehouse Alternative contemplates development of a warehouse on site. A warehouse is a permitted use in Subarea 19 of the PD-1 zoning district. The warehouse would serve as a staging area for consumer products that come into the area, via ship or other means, for their eventual distribution to retail stores in the region. It is anticipated that the Warehouse would consist of a maximum of 262,000 square feet of developed area. The warehouse would be a 24-hour operation, 6 days a week, with the facility closing down at midnight on Saturday and reopening on Sunday night. Maintenance crews, however, would work during the 24-hour off-period. There would be approximately 210 employees on the site at any one time.

The project site is a 17.8-acre parcel<sup>1</sup> and is located within Subarea 19 of the PD-1 (SEADIP) zoning district. SEADIP requires that 30 percent of the site be retained for usable open space. It is also assumed that Tank 5, a heating unit that occupies approximately 1.1 acres, would continue to be operated. The net developable acreage, after considering open space reservation and Tank 5, is approximately 11.4 acres. The warehouse would be characterized by large warehouse structures separated by drive aisles and loading zones. Landscaping would be provided as required by the Zoning Code.

The project site is located in Subarea 19 of PD-1, and the land use designation in the Long Beach General Plan is Land Use District (LUD) No. 7, Mixed Use. Subarea 19 of PD-1 allows a wide range of industrial uses, including manufacturing and outdoor storage of products and materials, and requires that 30 percent of the site be retained for usable open space. The project site is under the jurisdiction of the Local Coastal Program (LCP). A Local Coastal Development Permit (LCDP) is not required if no discretionary permits are needed. For this alternative, there is no discretionary action required; therefore, no LCDP is required. The Zoning Code requires staff site plan review for all new industrial projects in excess of 5,000 square feet.

The contemplated warehouse would be 35 feet high, with 27 feet from floor to ceiling in the interior space. The Zoning Code requires one parking space per 1,000 square feet of gross floor area for warehouse uses. Therefore, the number of parking spaces that would be required for this alternative is 262 parking spaces. This alternative would provide 267 standard parking spaces and 49 truck trailer parking spaces. One truck door/loading space would be provided for every 9,400 square feet of building area, for a total of 28 loading spaces. This number of loading spaces exceeds the Zoning Code requirements for loading spaces.<sup>2</sup>

### 6.5.2 Attainment of Project Objectives

The Warehouse Alternative would be generally consistent with Project Objectives 2 through 4, which call for a comprehensive site development, economical reuse of the site, and the transition of the site from underutilized industrial property to a use that provides job and promotes economic

<sup>1</sup> The project site is a total of 17.8 acres; 1.1 acres would remain as an existing tank farm, leaving 16.7 acres of the site available for development.

<sup>2</sup> The Zoning Code requires that industrial buildings 40,000 SF or greater supply 1 parking space plus 1 space for each additional 40,000 SF, for each individual user.

revitalization. Development under this alternative would be subject to site plan review and would result in development of a use that employs 210 people, contributing to the local economy. The Warehouse Alternative would not meet Objective 1 and to a lesser extent, Objective 5. This alternative would not provide a conveniently located commercial retail center that includes both a home improvement store as well as other retail center amenities that serve the needs of local residents and businesses (Objective 1). Also, the Warehouse Alternative would provide property tax to the City of Long Beach, but would not supplement the City's sales tax revenues (Objective 5).

### 6.5.3 Comparison of Impacts

**Aesthetics.** The Warehouse Alternative would substantially alter the visual character of the site by removing the existing tanks and constructing commercial warehouse structures. The Warehouse would be developed with 30 percent open space as required by the PD-1 (SEADIP) zoning district and perimeter and parking lot landscaping as required by the Zoning Code. It is anticipated that the warehouse structures would be visually dominant to motorists traveling on Loynes Drive toward Studebaker Road, but that the buildings would visually blend into its surroundings when viewed from a significant distance and elevation. Therefore, the effect of the Warehouse Alternative on any scenic vistas that may exist from a distant off-site area is not considered significantly adverse.

The project site boundaries are not directly adjacent to the Los Cerritos wetlands area, and the scenic quality of the wetlands would not be significantly affected by development of the project site. Studebaker Road, located adjacent to the project site, is not a designated State scenic highway. There are no scenic rock outcroppings located within the project limits. Impacts to scenic resources in the vicinity of the project site are considered less than significant.

A Warehouse has the potential to result in light and glare effects; however, it is anticipated that outdoor lighting could be designed to prevent light spillage in excess of that which has been referenced and analyzed in this EIR for the proposed project. For example, exterior lighting could be directed downward and away from adjacent streets and adjoining land uses in a manner designed to minimize off-site spillage. Since the Warehouse use is permitted in Subarea 19 of PD-1, there may not be an opportunity to impose conditions of approval or to enforce mitigation measures similar to those required for the proposed project.

**Air Quality.** Construction-related air emissions are the result of site demolition, grading, and construction activities. The Warehouse Alternative would result in demolition and grading equivalent to or greater than what is required for the proposed project. This alternative would result in greater building square footage, and would require more construction activity than the proposed project. The significant impacts associated with the short-term emissions from the proposed project are primarily the result of earth movement and the use of grading equipment. Therefore, although greater construction activities would be required for this alternative, the comparable level of demolition and grading indicates that the short-term emissions may be incrementally but not significantly greater than the proposed project. Similar levels of emission reductions would be achieved by the dust-control measures required by SCAQMD and summarized in the mitigation measures for the proposed project. Since the amount of demolition and grading required for this alternative is similar to that required for the proposed project, comparable dust-control measures can be assumed to have approximately the same effect to reduce short-term emissions as they would with the proposed project.

Long-term air emissions are associated with the operation of the project, including vehicular emissions and stationary source emissions. As illustrated in Table 6.B, operational air emissions are less for this alternative compared with the proposed project. The Warehouse Alternative would not exceed SCAQMD regional thresholds for operational emissions, and therefore would not result in significant operational air quality impacts. Neither the proposed project nor this alternative would result in a significant impact related to local CO hotspot concentrations (Tables 6.C and 6.D).

The Warehouse Alternative would result in a greater proportion of truck versus passenger car trips and, therefore, would be expected to result in increased emissions of diesel exhaust compared with the proposed project. Because diesel exhaust particulate is considered to be a toxic air pollutant, this increase of diesel truck travel near homes and other sensitive receptors could potentially cause a higher health risk than the preferred alternative. For a significant health risk from diesel exhaust to occur, these trucks would need to be idling within 50 feet of sensitive receptors for several hours a day, several days a week, over several years. Since this truck travel would be free-flowing along Loynes Drive (within 50 feet of homes), it is not anticipated that the increased health risks would be significant.

**Biological Resources.** The following project impacts to biological resources were analyzed and found to be less than significant: impacts to sensitive plant species; sensitive wildlife species; wildlife movement corridors; jurisdictional wetlands; and adopted ordinances, plans, and policies. The grading limits and development limits for the Warehouse Alternative are the same as for the proposed project; therefore, the impacts to these identified biological resources would be less than significant for this alternative.

The project was found to have a potentially significant impact to Streambeds and Waters of the U.S. The jurisdictional delineation for the site identified the limits of both potential Corps nonwetland waters of the U.S. and CDFG streambed jurisdiction at the Los Cerritos Channel just north of the Loynes Drive bridge. Sewer line construction across the Los Cerritos Channel would occur above and outside potential jurisdictional limits, and the installation of the sewer line would not include any work within the channel itself. The potential for impacts to the Los Cerritos Channel, such as incidental discharge of fill, would be the result of grading activity, which is the same for the proposed project and for this alternative. Therefore, implementation of precautionary protective barriers as described in Mitigation Measure 4.3-1 would prevent any incidental discharge of fill, debris, or other material into the Los Cerritos Channel and the two adjacent water supply channels and would reduce potential impacts to jurisdictional waters to less than significant levels, for both the proposed project and the Warehouse Alternative. Therefore, the construction of the sewer line would not impact jurisdictional areas and would not be subject to agency jurisdiction.

**Cultural and Paleontological Resources.** The project impacts to historical resources were analyzed and found to be less than significant. The existing tanks on site were not found to be distinctive in their design, are not associated with events of significance, and are not likely to yield important historic information; therefore, they and the Alamitos Tank Farm as a whole are not considered important cultural resources as defined by CEQA and are not eligible for listing on the California Register of Historical Resources. Therefore, neither the proposed project nor the Warehouse

Alternative would have a significant effect on historic resources, and no mitigation is required for impacts to historical resources on site.

Impacts to paleontological resources and archaeological and prehistoric resources were analyzed. It was determined that it is unlikely that *in situ* deposits of fossiliferous sediments would be encountered during project construction. However, since there is a potential to encounter unknown paleontological resources during excavation activities, Mitigation Measure 4.4-1 was included to address potential impacts with regard to paleontological resources that may be discovered. Similarly, it was determined that there is no evidence of prehistoric use of the project site. Because the project area was originally tidal marshland, there is little potential for buried prehistoric resources, and no prehistoric resources have been previously recorded within 0.5 mile of the project area. However, since there is the possibility that human remains may be encountered during excavation activities, Mitigation Measure 4.4-2 was included to address this issue for the proposed project.

The grading limits and development limits for the Warehouse Alternative are the same as for the proposed project; therefore, the potential project and cumulative impacts to the cultural and paleontological resources would be essentially the same for this alternative. Monitoring for archaeological and paleontological resources is not required as part of the site plan review and building permit process. Therefore, implementation of Mitigation Measures 4.4-1 and 4.4-2 cannot be guaranteed. These measures require monitoring so that in the unlikely event that resources are uncovered, they would be appropriately protected. Therefore, both project level and cumulative impacts to the cultural and paleontological resources could be adverse for the Warehouse Alternative.

**Geology and Soils.** The project impacts to shrinkage and subsidence were analyzed and found to be less than significant. The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction. No oil exploration has been reported at the site specifically, although the site is located within the limits of the greater Seal Beach Oil Field (Mission 2004). Known ground subsidence associated with oil withdrawal was recorded in the Wilmington area, approximately 8 miles west of the site. Any historic land subsidence in the site area has been since minimized as a result of freshwater injection through the operations of the Los Alamitos Barrier project, which is located near the site. Thus, the potential site constraint associated with land subsidence is considered low, and no mitigation is required for either the proposed project or the Warehouse Alternative.

The geologic analysis for the project identified several potentially significant geologic effects, including: seismic considerations, erosion potential, liquefaction, lateral spreading, expansive soils, and site preparation. This alternative would result in comparable grading and building activity on the project site and similar or slightly greater building mass. Therefore, comparable geologic mitigation measures would apply. These project impacts are reduced to below a level of significance with the implementation of Mitigation Measures 4.5-1 to 4.5-3, which would be reflected in the recommendations of the geologic report required prior to the issuance of building permits. The specifications for warehouses can be more stringent than those for a home improvement store, in which case additional subgrade excavation and substructure support would be necessary.



**Hazards and Hazardous Materials.** There is a potential for significant hazardous substances impacts with implementation of the project during the construction and operation phases of the project. Risks associated with demolition, grading, and construction are essentially the same for the proposed project and the Warehouse Alternative, since the grading limits are the same.

**Demolition and Construction.** Potential risks associated with demolition, grading, and construction include:

- Improper handling of the ASTs, pipeline conveyance systems, and their contents
- Improper handling of asbestos, lead-based paint, and PCBs in structures proposed for demolition
- Potential to disturb Tank No. 5 and supporting equipment that would remain in a 1.1-acre area in the northern portion of the site
- Detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment
- Methane
- Routine use of hazardous materials such as fuels, paints, and solvents during project construction

However, most of these activities are subject to specific local, State, and federal regulations, and compliance with these regulations is considered adequate to address potential impacts. Therefore, implementation of required actions consistent with Mitigation Measures 4.6.1 through 4.6.9 would reduce potential impacts from demolition, grading, and construction activities to less than significant levels. Completion of a detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment. Methane was found in shallow soils above regulatory levels during a preliminary methane soil gas investigation. In order to delineate methane concentrations for the proposed project, a methane soil gas investigation is necessary after rough grading and prior to building construction and utility installation. This method of testing is appropriate because methane concentrations and methane migration would likely change during grading and site preparation. The project applicant would also be required to implement standard best management practices (BMPs) with regard to hazardous materials use during construction. Actions consistent with Mitigation Measures 4.6.1 through 4.6.6, 4.7.1, and 4.7.2 would reduce potential significant hazardous substances impacts associated with demolition, grading, excavation, and construction of the project to less than significant levels.

**Operation.** It is assumed that the Warehouse Alternative would utilize, store, and sell hazardous materials such as solvents, paints, and pesticides at quantities similar to or less than the proposed project's home improvement store. BMPs are required to prevent pollutants from discharging into the storm drain system from the proposed development and in particular from the outdoor garden center (refer to Section 4.7, Hydrology and Water Quality). All businesses in the City of Long Beach that utilize hazardous materials above State thresholds are required to submit a Hazardous Materials Release Response Plan and Inventory to the Long Beach/Signal Hill CUPA for review

and approval (Municipal Code, Chapter 8.86). Implementation of BMPs and compliance with local, State, and federal regulations regarding hazardous materials use and storage are considered adequate to address these potential hazards. Therefore, actions consistent with Mitigation Measures 4.6.7 and 4.7.4 would reduce potential impacts regarding use and storage of hazardous materials during operation of the warehouse to less than significant levels.

The project site is located near the AES Alamitos electrical generating plant. The plant uses a 29 percent ammonium hydroxide solution in its units for air pollution control purposes as well as other hazardous materials in its day-to-day operations.<sup>1</sup> The hazards associated with hazardous materials present at the AES facility include those commonly associated with the handling of lubricating oils, caustics, and oxidizers. Precautions against these hazards are set forth in the plant's California ARP required Risk Management Plan. Because the project would provide receptors (employees) directly adjacent to the plant, revisions to the AES facility's Risk Management Plan and Emergency Procedures may be required. Compliance with local, State, and federal regulations regarding risk management and emergency response is considered adequate to address these potential hazards. Therefore, actions consistent with Mitigation Measure 4.6.8 would reduce potential impacts from operations or emergencies at the AES facility to less than significant levels.

As stated above, the Pacific Energy-owned and operated Tank No. 5 and its associated equipment and pipelines would remain on site. There is the potential for the proposed project to inhibit access to these facilities in the event of an emergency. In addition, the Hazardous Materials Release Response Plan for this distribution system would require revisions to accommodate the relocated pipelines. Compliance with local, State, and federal regulations regarding release/spills and emergency response is considered adequate to address this potential hazard. Therefore, actions consistent with Mitigation Measure 4.6.9 would reduce potentially emergency response impacts related to these existing facilities to less than significant levels.

After construction and during ongoing operation of the project, methane could occur in elevated concentrations in subsurface soils at the site. The State has specified design features to prevent accumulation of methane in buildings. As mentioned above, these design features are subject to approval by the City of Long Beach Fire Department during final design. Actions consistent with Mitigation Measure 4.6.5 would reduce potential methane impacts with project operation to less than significant levels.

There are no schools within one-quarter mile of the project site. Kettering Elementary School is located within one-half mile of the project site and Hill Middle School is within one mile of the project site. Compliance with the requirements identified mitigation measures would ensure that any hazardous emissions or handling of hazardous substances or materials would not result in a significant impact to the surrounding area, including the proposed project.

**Hydrology and Water Quality.** The project site is not located within an area that is used for groundwater production, and neither the proposed project nor any of the alternatives would have a significant effect on groundwater supply. The project site is located in Zone X, which is outside of the

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<sup>1</sup> Telephone conversation with Steve Maghy, AES Environmental Manager, June 1, 2004.

100-year flood hazard area.<sup>1</sup> Therefore, implementation of the project or the Warehouse Alternative would not place structures within a 100-year flood hazard area that would impede or redirect flood flows, and no mitigation is required.

The site is subject to inspection by the RWQCB and the City during construction (General Construction Activity Permit and Municipal Code, respectively). These requirements apply to all new development, regardless of whether the project requires a discretionary approval action. Implementation of BMPs as described for the proposed project in Section 4.7 of this EIR, included in Mitigation Measures 4.7.1, 4.7.2, and 4.7.3, would reduce potential waste discharge and water quality violations related to runoff during construction to less than significant levels.

Table 4.7.E lists the operational BMPs required by the City of Long Beach under the Municipal NPDES Permit for priority development projects, including the Warehouse Alternative. Treatment Control BMPs would be incorporated into the design of the on-site storm drain system to treat project runoff in accordance with the SUSMP standards.

In order to comply with waste discharge requirements, a SUSMP would be prepared for the Warehouse Alternative that would target control of pollutants in runoff typically produced by that land use (e.g., bacteria and viruses; nutrients; trash; oil and grease; sediment, dissolved solids, hydrocarbons, and pesticides; Table 4.7.A). In order to comply with water quality standards and prevent further degradation of water quality, the SUSMP for this alternative would address pollutants that have impaired receiving waters for the project as applicable (i.e., bacteria, ammonia, metals, pesticides, and nutrients [for algae]; Section 4.7.2). Implementation of a project SUSMP that addresses these pollutants of concern to the maximum extent practicable, and consistent with Mitigation Measure 4.7.4, would be required to reduce potential water quality impacts to a less than significant level.

Water quality modeling and calculations were conducted for the proposed project and indicated that pollutant concentrations in runoff would be lower with implementation of the proposed project compared with the existing conditions if Source Control and Treatment BMPs are implemented. This alternative would result in developed conditions, including open space, structures, and pavement, that are similar to the proposed project; therefore, similar water quality features would be required to reduce potential pollutants in surface water runoff. If this alternative incorporated comparable runoff water quality source controls, Treatment BMPs, and general project design consistent with Mitigation Measures 4.7.4 through 4.7.6, then potential operational water quality impacts would be less than significant for this alternative as well.

A hydrology plan would be required for the Warehouse Alternative at the time building permit applications are submitted to the City. The hydrology requirements would be similar to those required for the proposed project, since the postgrading drainage conditions would be essentially the same. It is anticipated that the Warehouse site design would not substantially alter the drainage pattern of the site, cause substantial erosion, or exceed the capacity of existing drainage systems.

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<sup>1</sup> Mission GeoScience, Inc., *Engineering Geologic & Geohazards Assessment Report, Long Beach Home Depot, 400 Studebaker Road, Long Beach, California*. December 2004 (Appendix E).

**Land Use.** The project site is located between the Los Cerritos Channel and the San Gabriel River. The land use patterns around the project site have been established with industrial land uses to the north, south, and east and residential land uses beyond Los Cerritos Channel to the west. An infill industrial project such as the Warehouse Alternative would be generally consistent with nearby uses. Required setbacks and landscaping, as well as the distance between residential areas and the proposed project site (approximately 550 feet) indicate that potential impacts to residential uses west of the Los Cerritos Channel are minimized.

This Alternative would result in an infill development on a parcel within an established urban community. The Warehouse is a permitted use in the subject zoning district, and no General Plan Amendment or Zone Change would be required. While the proposed project would result in the loss of 16.7 acres from the City's inventory of potential industrial land, the Warehouse Alternative would retain the existing zoning of the site and would not deplete the City's inventory of industrially zoned land. This alternative would result in an increase in the City's inventory of industrial uses.

Short-term effects of the Warehouse Alternative would be comparable to those of the proposed project and would occur as a result of demolition of the existing on-site tanks, site grading, and construction activity for on-site and off-site improvements. These activities would result in short-term air quality effects as described in Section 4.2, short-term noise effects as described in Section 4.9, and short-term traffic effects as described in Section 4.11. None of the surrounding land uses would experience short-term effects outside those described in those sections. Short-term noise effects are less than significant with compliance with the City's Noise Ordinance.

The extension of the sewer line across Studebaker Road and the bridge on Loynes Drive to the nearest connection point on Vista would be required for this alternative as for the proposed project and would also result in short-term construction impacts. The force main would run underground to the Loynes Drive bridge, be mounted on the bridge, and then continue underground in the street to a connection point on Vista Street. There the force main would connect with an existing eight-inch line maintained by the Long Beach Water Department. The land use effects of the extension are short-term construction impacts. An encroachment permit would be needed from the City of Long Beach for construction in City roadways, and a separate encroachment permit would be needed from the County of Los Angeles Flood Control District for construction in the Los Cerritos Channel (refer to Figure 3.6, Sewer Line Extension).

Street improvements and extension of the sewer line may have short-term traffic and noise impacts on adjoining properties. The adjoining properties are primarily residential uses that would experience noise from demolition and construction equipment as the installation progresses. It is estimated that pipe installation would be accomplished over a one-month time period, with the actual time adjacent or close to a particular property minimized. Construction activities would be required to adhere to the City's ordinance (see Section 4.9) for noise control, and access to individual residences would not be restricted. Therefore, short-term noise impacts to each adjoining property would be brief and below a level of significance.

**Noise.** Construction-related noise is the result of site demolition, grading, and construction activities. The Warehouse Alternative would result in demolition and grading equivalent to what is required for the proposed project. This alternative would result in greater building square footage and would

require more construction activity than the proposed project. Therefore, noise from demolition and grading would be comparable to the proposed project. Noise from construction activity may occur for a longer period of time since the Warehouse results in greater building area compared with the proposed project. Compliance with the City's Noise Ordinance (Long Beach Municipal Code Chapter 8.80) is assumed for the proposed project and for all of the alternatives. Although the Warehouse does not require discretionary permits and therefore there would be no mechanism to ensure the implementation of mitigation measures, the noise mitigation measures are consistent with the requirements of the City's Noise Ordinance. Therefore, Mitigation Measure 4.9.2, limiting the hours of construction in accordance with the City of Long Beach's standards, would be applied to this alternative since it is a requirement of the City's Noise Ordinance. Thus, no construction activities would be permitted outside of the specified hours. There are no significant short-term noise effects related to the proposed project or any of the alternatives.

Long-term noise effects are associated with the operation of the project, including vehicular emissions and stationary source emissions. This alternative would generate fewer trips than the proposed project. Operational noise levels from traffic were calculated for this alternative and would not be appreciably different for this alternative compared with the proposed project. While neither the proposed project nor the Warehouse Alternative result in a significant operational noise impact, there would be increased noise during evening hours as a result of this alternative, since the hours of operation are assumed to be 24 hours per day, six days per week.

**Public Services and Utilities.** There is an existing identified long-term capacity shortfall at waste disposal facilities in Los Angeles County, as described in Section 4.10 of the EIR. The Warehouse Alternative would generate approximately 394.6 tons of solid waste each year, assuming 1,685 square feet of building area per employee and 1.9 tons of solid waste per employee per year. While this is less than what would be generated by the proposed project, it represents a contribution to a potential cumulative shortfall of committed landfill area in Los Angeles County. While waste reduction measures could be implemented for this alternative, they would not be sufficient to address subregional landfill capacity issues in the long-term. Therefore, cumulative impacts of the Warehouse Alternative associated with solid waste disposal capacity at Class III landfills would remain significant and unavoidable.

All other potential impacts to public services and utilities are anticipated to be less than significant.

**Transportation and Circulation.** The trip generation for the warehouse was based on the following operational characteristics:

- 210 employees are on site at any one time (employees are assumed to be inbound during the a.m. peak hour and outbound during the p.m. peak hour with an average vehicle )
- 85 trucks leave between 4:00 a.m. and 8:00 a.m. (outbound a.m. peak hour trip generation)
- 85 trucks return between 3:00 p.m. and 6:00 p.m. (inbound p.m. peak hour trip generation)
- 30 trucks arrive and depart (bringing new product in for subsequent distribution) between 9:00 a.m. and 3:00 p.m. (inbound and outbound non-peak hour trips contribute to average daily traffic)

- The facility operates 24 hour a day, 6 days a week
- The Weekend Peak Hour trip generation assumes that half of the employees leave the site during the lunch period and all of the 30 trucks that bring in new products arrive and depart during the peak period

Using this information, the existing trip generation was derived and compared to the project trip generation. This comparison is shown in Table 6.I. For purposes of the trip generation, LSA assumed a 2.0 passenger car equivalency (PCE) for trucks. This comparison is shown in Table 6.I.

**Table 6.I: Warehouse Alternative Trip Generation**

Land Use	Size	Units	ADT	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation									
Warehouse									
Passenger Cars	350	TSF	540	210	0	210	0	210	210
Trucks	350	TSF	460	0	170	170	170	0	170
Total Trip Generation (PCE)			1,090	210	170	380	170	210	380
Proposed Project <sup>1</sup>			5,783	131	108	239	206	216	422
Change in Trips from Project			-4,693	79	62	141	-36	-6	-42

Land Use	Size	Units	ADT	Weekend Peak Hour		
				In	Out	Total
Trip Generation						
Warehouse						
Passenger Cars	350	TSF	540	105	105	210
Trucks	350	TSF	460	60	60	120
Total Trip Generation (PCE)			1,090	165	165	330
Proposed Project <sup>1</sup>			8,503	513	439	952
Change in Trips from Project			-7,413	-348	-274	-622

Notes: TSF = Thousand Square Feet

<sup>1</sup> Project Trip Generation from Section 4.11, Traffic and Transportation.

Trip Generation assumes 2.0 Passenger Car Equivalency (PCE) for trucks.

As shown in the table, the Warehouse Alternative is forecast to generate 1,090 weekday and weekend daily trips, 380 a.m. peak-hour trips, 380 p.m. peak-hour trips, and 330 weekend peak-hour trips. This alternative would generate 4,693 fewer daily weekday trips, 141 additional weekday a.m. peak-hour trips, 42 fewer weekday p.m. peak-hour trips, and 622 fewer weekend peak-hour trips compared with the proposed project.

Vehicle trips associated with the Warehouse Alternative would be distributed to the surrounding roadways differently than trips from a home improvement store. Vehicle trips for the Warehouse Alternative were assigned to the roadway network using the following distribution patterns:

- To/from Bellflower Boulevard North: 10 percent
- To/from Pacific Coast Highway North: 15 percent
- To/from Pacific Coast Highway South: 5 percent
- To/from 7th Street West: 10 percent
- To/from SR-22 East: 35 percent
- To/from 2nd Street West: 10 percent
- To/from 2nd Street East: 5 percent
- To/from Studebaker Road North: 10 percent

Levels of service at the study area intersections were calculated for the Warehouse Alternative in the cumulative weekday and weekend conditions. Table 6.J compares the weekday intersection levels of service for the Warehouse Alternative and the cumulative baseline (2006) condition. As shown in Table 6.J, the Warehouse Alternative is forecast to cause a significant impact to the intersection of Studebaker Road/SR-22 westbound ramps and Studebaker Road/Loynes Drive.

Table 6.K compares the weekend intersection levels of service for the Warehouse Alternative and the 2006 baseline condition. As shown in Table 6.K, although four intersections would continue to operate with unsatisfactory levels of service (LOS E or worse) with the Warehouse Alternative, this alternative would not significantly impact any study area intersections during the weekend peak hour.

The Warehouse Alternative would not significantly impact any of the intersections that are impacted by the project during the weekday peak hours. However, during the weekday p.m. peak hour, the intersection of Studebaker Road/Loynes Drive would be significantly impacted by the Warehouse Alternative. During the weekend peak hour, the Warehouse Alternative would result in three fewer significant impacts compared with the proposed project. The intersections of Studebaker Road/2nd Street, PCH/7th Street, and PCH/2nd Street would be significantly impacted by the proposed project, but would not experience significant impacts with the Warehouse Alternative.

Table 6.L provides a comparison of the levels of service with the proposed project and with the Warehouse Alternative. As shown in Table 6.L, the intersection of Studebaker Road/Loynes Drive (the project driveway) would operate at a lower level of service with the Warehouse Alternative than with the proposed project during both peak hours. This decrease in the level of service would be expected with the increase in trips during the a.m. peak hour; however, the p.m. peak-hour trip generation is lower with the Warehouse Alternative and yet the impact to the intersection is greater. This decrease in the level of service is not associated with the trip generation of the Warehouse Alternative, as this alternative is forecast to generate fewer trips than the proposed project. Rather, the intersection operation is forecast to worsen because there would be different traffic signal phasing for this alternative compared to the proposed project. The intersection has been analyzed without the northbound and southbound protected-permissive left-turn phasing that would be provided with the proposed project. This type of phasing provides protected left-turn movements with a green arrow, and then allows left-turning traffic to yield to oncoming traffic during the through phase, when the green indicator is displayed. With the construction of a light industrial use, as allowed under the existing zoning, the traffic generated by the site would be primarily comprised of large trucks. For

**Table 6.J: 2006 Plus Warehouse Alternative Weekday Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions				2006 Plus Warehouse Alternative				Change in ICU		Exceeds City Significance Threshold	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	AM	PM
1	Studebaker Rd/SR-22 WB ramps	0.711	C	1.022	F	0.742	C	1.048	F	0.031	0.026	N	Y
2	Studebaker Rd/SR-22 EB ramps	0.608	B	0.870	D	0.643	B	0.889	D	0.035	0.019	N	N
3	Studebaker Rd/AES Plant driveway	0.637	B	0.819	D	0.665	B	0.854	D	0.028	0.035	N	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.867	D	0.872	D	0.986	E	0.987	E	0.119	0.115	Y	Y
5	Studebaker Rd/2nd Street	0.965	E	0.984	E	0.979	E	0.997	E	0.014	0.013	N	N
6	PCH/7th Street (CMP)	1.197	F	1.306	F	1.205	F	1.315	F	0.008	0.009	N	N
7	PCH/Bellflower Blvd	0.707	C	0.830	D	0.719	C	0.841	D	0.012	0.011	N	N
8	PCH/Loynes Dr	0.730	C	0.863	D	0.765	C	0.863	D	0.035	0.000	N	N
9	PCH/2nd Street (CMP)	0.933	E	1.057	F	0.943	E	1.064	F	0.010	0.007	N	N
10	PCH/Studebaker Rd	0.895	D	1.319	F	0.897	D	1.322	F	0.002	0.003	N	N
11	Bixby Village Rd/Loynes Dr	0.251	A	0.413	A	0.265	A	0.430	A	0.014	0.017	N	N

Notes:

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions. CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.



**Table 6.K: 2006 Plus Warehouse Alternative Weekend Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions		2006 Weekend Plus Warehouse Alternative		Change in ICU	Exceeds City Significance Threshold
		Weekend Peak Hour		Weekend Peak Hour			
		ICU	LOS	ICU	LOS		
1	Studebaker Rd/SR-22 WB ramps	0.746	C	0.771	C	0.025	N
2	Studebaker Rd/SR-22 EB ramps	0.656	B	0.689	B	0.033	N
3	Studebaker Rd/AES Plant driveway	0.660	B	0.687	B	0.027	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.729	C	0.820	D	0.091	N
5	Studebaker Rd/2nd Street	0.936	E	0.948	E	0.012	N
6	PCH/7th Street (CMP)	0.910	E	0.919	E	0.009	N
7	PCH/Bellflower Blvd	0.744	C	0.756	C	0.012	N
8	PCH/Loynes Dr	0.840	D	0.840	D	0.000	N
9	PCH/2nd Street (CMP)	0.991	E	0.999	E	0.008	N
10	PCH/Studebaker Rd	1.189	F	1.191	F	0.002	N
11	Bixby Village Rd/Loynes Dr	0.290	A	0.303	A	0.013	N

Notes:

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions. CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.

Table 6.L: Comparison of Warehouse Alternative with Proposed Project

Intersection	Weekday Peak Hour Conditions									
	2006 Plus Project				2006 Plus Warehouse Alternative				Change in ICU with Warehouse Alternative	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU Change	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.725	C	<b>1.045</b>	<b>F</b>	0.742	C	<b>1.048</b>	<b>F</b>	0.017	0.003
2. Studebaker Rd/SR-22 EB ramps	0.626	B	0.898	D	0.643	B	0.889	D	0.017	-0.009
3. Studebaker Rd/AES Plant driveway	0.651	B	0.849	D	0.665	B	0.854	D	0.014	0.005
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.673	B	0.858	D	<b>0.986</b>	<b>E</b>	<b>0.987</b>	<b>E</b>	0.313	0.129
5. Studebaker Rd/2nd Street	0.975	E	<b>1.002</b>	<b>F</b>	0.979	E	0.997	E	0.004	-0.005
6. PCH/7th Street (CMP)	1.201	F	1.313	F	1.205	F	1.315	F	0.004	0.002
7. PCH/Bellflower Blvd	0.715	C	0.844	D	0.719	C	0.841	D	0.004	-0.003
8. PCH/Loynes Dr	0.753	C	0.864	D	0.765	C	0.863	D	0.012	-0.001
9. PCH/2nd Street (CMP)	0.941	E	1.066	F	0.943	E	1.064	F	0.002	-0.002
10. PCH/Studebaker Rd	0.896	D	1.322	F	0.897	D	1.322	F	0.001	0.00
11. Bixby Village Rd/Loynes Dr	0.267	A	0.438	A	0.265	A	0.430	A	-0.002	-0.008

Intersection	Weekend Peak Hour Conditions				
	2006 Plus Project		2006 Plus Warehouse Alternative		Change in ICU with Warehouse Alternative
	ICU	LOS	ICU	LOS	ICU Change
	ICU	LOS	ICU	LOS	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.805	B	0.771	C	-0.034
2. Studebaker Rd/SR-22 EB ramps	0.732	C	0.689	B	-0.043
3. Studebaker Rd/AES Plant driveway	0.730	C	0.687	B	-0.043
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.809	B	0.820	D	0.011
5. Studebaker Rd/2nd Street	<b>0.980</b>	<b>E</b>	0.948	E	-0.032
6. PCH/7th Street (CMP)	<b>0.938</b>	<b>E</b>	0.919	E	-0.019
7. PCH/Bellflower Blvd	0.795	C	0.756	C	-0.039
8. PCH/Loynes Dr	0.840	D	0.840	D	0.000
9. PCH/2nd Street (CMP)	<b>1.020</b>	<b>F</b>	0.999	E	-0.021
10. PCH/Studebaker Rd	1.195	F	1.191	F	-0.004
11. Bixby Village Rd/Loynes Dr	0.331	A	0.300	A	-0.031

Note: Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

<sup>1</sup>Improvements to intersection included with project design.

safety and operational reasons, it is not advisable to use protected-permissive left-turn phasing when the majority of left-turning traffic is trucks. Trucks have a much longer start-up and acceleration time than passenger cars and need very large gaps in the through traffic stream to make a permitted left-turn into the project site. As a result, only protected left-turns are provided in the Warehouse Alternative, thus lowering the level of service of the northbound and southbound left-turn movements and resulting in a small increase in the ICU at this location when compared with the proposed project. In addition, the Warehouse Alternative would not include the construction of an additional northbound through lane on Studebaker Road from Loynes Drive to SR-22, which would be implemented with the proposed project. Therefore, this intersection would be significantly impacted based on this alternative.

In addition, as shown in Table 6.K, the intersection of Studebaker Road/SR-22 westbound ramps would operate at a lower level of service with the Warehouse Alternative than with the proposed project during the p.m. peak hour. This increase in level of service is due to the number of trips destined to the SR-22 for the warehouse compared to the project. It should be noted that this intersection is also significantly impacted with the implementation of the proposed Home Depot project.

The remaining study area intersections generally would operate at a lower level of service in the a.m. peak hour than with the proposed project and at a higher level of service during the p.m. peak hour than with the proposed project. This is consistent with the trip generation, which indicates that the Warehouse Alternative would generate more trips in the a.m. peak hour and fewer trips in the p.m. peak hour than the proposed project. No project impacts would be exacerbated with implementation of the Warehouse Alternative. During the weekend peak hour, the levels of service at study area intersections with the Warehouse Alternative would be better than or the same as with the proposed project.

#### **6.5.4 Summary for Alternative 3**

The Warehouse Alternative would not avoid the significant unavoidable adverse impacts of the proposed project related to traffic, construction air quality, and cumulative project impacts associated with solid waste disposal capacity at Class III landfills. The Warehouse Alternative would avoid the significant project-related operational air quality effect.

The intersection of Studebaker Road/Loynes Drive (the project driveway) would operate at a lower level of service with the Warehouse Alternative than with the proposed project during both the a.m. and p.m. peak hours. The Warehouse Alternative would not include the construction of a northbound through lane on Studebaker Road from Loynes Drive to SR-22. The additional lane is a project feature associated with the home improvement store proposal. Therefore, this alternative would result in significant impacts to Studebaker Road at its intersection with the SR-22 westbound ramps. The remaining study area intersections generally would operate at a lower level of service in the a.m. peak hour than with the proposed project and better during the p.m. peak hour than with the proposed project. This is consistent with the trip generation, which indicates that the Warehouse Alternative would generate more trips in the a.m. peak hour and fewer trips in the p.m. peak hour than the proposed project.

The Warehouse Alternative would be generally consistent with Project Objectives 2 through 4, which call for a comprehensive site development, economical reuse of the site, and the transition of the site from underutilized industrial property to a use that provides job and promotes economic revitalization. This alternative would not provide a conveniently located commercial retail center that includes a home improvement store as well as other retail center amenities that serve the needs of local residents and businesses (Objective 1). Also, the Warehouse Alternative would provide property tax to the City of Long Beach, but would not supplement the City's sales tax revenues (Objective 5).

## **6.6 ALTERNATIVE 4: EXISTING ZONING/LIGHT INDUSTRIAL**

### **6.6.1 Description**

The Light Industrial Alternative considers development of the project site with a light industrial use such as a printing plant, data processing equipment assembly, or a power station. Light industrial uses are characterized by the primary operations occurring entirely within enclosed structures.

The project site is a 17.8-acre parcel<sup>1</sup> and is located within Subarea 19 of the PD-1 (SEADIP) zoning district. SEADIP requires that 30 percent of the site be retained for usable open space. It is assumed that Tank 5, a heating unit that occupies approximately 1.1 acres, would continue to be operated. The net developable acreage, after considering open space reservation and Tank 5, is approximately 11.4 acres.

Subarea 19 of PD-1 incorporates the land use standards of the IG zone. The land use designation in the Long Beach General Plan is LUD No. 7, Mixed Use. The potential light industrial uses described above are permitted uses in the IG zone, which allows a wide range of industrial uses, including manufacturing and outdoor storage of products and materials. The project site is under the jurisdiction of the LCDP. A Local Coastal Development Permit is not required since no discretionary permits are needed to authorize this use. The Zoning Code requires staff site plan review for projects in the industrial zones that exceed 5,000 square feet in size.

The maximum lot coverage permitted under IG standards is 80 percent, although in this case the SEADIP open space requirements (30 percent of the site) reduce the maximum lot coverage to 70 percent. The light industrial use would consist of a maximum of 350,000 square feet of developed area.

In order to meet the 30 percent open space requirement, the building(s) would have two stories up to the maximum permitted height of 35 feet. The Zoning Code requires two parking spaces per 1,000 square feet of gross floor area for manufacturing, processing, packing, or assembly land uses. Therefore, the number of parking spaces that would be required for this alternative is 700 spaces.

### **6.6.2 Attainment of Project Objectives**

The Existing Zoning/Light Industrial Alternative would be generally consistent with Project Objectives 2 through 4, which call for a comprehensive site development, economical reuse of the

<sup>1</sup> The project site is a total of 17.8 acres; 1.1 acres would remain as an existing tank farm, leaving 16.7 acres of the site available for development.

site, and the transition of the site from underutilized industrial property to a use that provides job and promotes economic revitalization. Development under this alternative would be subject to site plan review and would result in development of a use that provides employment, contributing to the local economy. The Light Industrial Alternative would not meet Objective 1 and to a lesser extent, Objective 5. This alternative would not provide a conveniently located commercial retail center that includes a home improvement store as well as other retail center amenities that serve the needs of local residents and businesses (Objective 1). Also, the Light Industrial Alternative would provide property tax to the City of Long Beach, but would not supplement the City's sales tax revenues (Objective 5).

### 6.6.3 Comparison of Impacts

**Aesthetics.** The Light Industrial Alternative would substantially alter the visual character of the site by removing the existing tanks and constructing commercial warehouse structures. The Light Industrial would be developed with 30 percent open space as required by SEADIP and perimeter and parking lot landscaping as required by the Zoning Code. It is anticipated that the warehouse structures would be visually dominant to motorists traveling on Loynes Drive toward Studebaker Road, but that the buildings would visually blend into its surroundings when viewed from a significant distance and elevation. Therefore, the effect of the Light Industrial Alternative on any scenic vistas that may exist from a distant off-site area is not considered significantly adverse.

The project site boundaries are not directly adjacent to the Los Cerritos wetlands area, and the scenic quality of the wetlands would not be significantly affected by development of the project site. Studebaker Road, located adjacent to the project site, is not a designated State scenic highway. There are no scenic rock outcroppings located within the project limits. Impacts to scenic resources in the vicinity of the project site are considered less than significant.

The Light Industrial Alternative has the potential to result in light and glare effects; however, it is anticipated that outdoor lighting could be designed to prevent light spillage in excess of that which has been referenced and analyzed in this EIR for the proposed project. For example, exterior lighting could be directed downward and away from adjacent streets and adjoining land uses in a manner designed to minimize off-site spillage. Since the Light Industrial use is permitted in Subarea 19 of the PD-1 zone, there may not be an opportunity to impose conditions of approval or to enforce mitigation measures similar to those required for the proposed project.

**Air Quality.** Construction-related air emissions are the result of site demolition, grading, and construction activities. The Light Industrial Alternative would result in demolition and grading equivalent to or greater than what is required for the proposed project. This alternative would result in greater building square footage, and would require more construction activity than the proposed project. The significant impacts associated with the short-term emissions from the proposed project are primarily the result of earth movement and the use of grading equipment. Therefore, although greater construction activities would be required for this alternative, the comparable level of demolition and grading indicates that the short-term emissions may be incrementally but not significantly greater than the proposed project. Similar levels of emissions reductions would be achieved by the dust-control measures required by SCAQMD and summarized in the mitigation measures for the proposed project. Since the amount of demolition and grading required for this

alternative is similar to that required for the proposed project, comparable dust-control measures can be assumed to have approximately the same effect to reduce short-term emissions as they would with the proposed project.

Long-term air emissions are associated with the operation of the project, including vehicular emissions and stationary source emissions. As illustrated in Table 6.B, operational air emissions are less for this alternative compared with the proposed project, but still exceed the level of significance. The significant effects of both the proposed project and Light Industrial Alternative include regional CO, ROC, and NO<sub>x</sub> emissions. The mitigation measures included for the proposed project would also be assumed for this alternative; however, these measures reduce energy consumption and therefore do not reduce the majority of the operational emissions resulting from vehicular traffic generated by the project. Therefore, it is reasonable to assume that for this alternative, as well as for the proposed project, mitigation would not substantially reduce the significant, long-term operational air quality impacts. Neither the proposed project nor the Light Industrial Alternative would result in a significant impact related to local CO hotspot concentrations (Tables 6.C and 6.D).

The Light Industrial Alternative would result in a greater proportion of truck trips versus passenger car and, therefore, would be expected to result in increased emissions of diesel exhaust compared with the proposed project. Because diesel exhaust particulate is considered to be a toxic air pollutant, this increase of diesel truck travel near homes and other sensitive receptors could potentially cause a higher health risk than the preferred alternative. For a significant health risk from diesel exhaust to occur, these trucks would need to be idling within 50 feet of sensitive receptors for several hours a day, several days a week, over several years. Since this truck travel would be free-flowing along Loynes Drive (within 50 feet of homes), it is not anticipated that the increased health risks would be significant.

**Biological Resources.** The following project impacts to biological resources were analyzed and found to be less than significant: impacts to sensitive plant species; sensitive wildlife species; wildlife movement corridors; jurisdictional wetlands; and adopted ordinances, plans, and policies. The grading limits and development limits for the Light Industrial Alternative are the same as for the proposed project; therefore, the impacts to these identified biological resources would be less than significant for this alternative.

The project was found to have a potentially significant impact to Streambeds and Waters of the U.S. The jurisdictional delineation for the site identified the limits of both potential Corps nonwetland waters of the U.S. and CDFG streambed jurisdiction at the Los Cerritos Channel just north of the Loynes Drive bridge. Sewer line construction across the Los Cerritos Channel would occur above and outside potential jurisdictional limits, and the installation of the sewer line would not include any work within the channel itself. The potential for impacts to the Los Cerritos Channel, such as incidental discharge of fill, would be the result of grading activity, which is the same for the proposed project and for this alternative. Therefore, implementation of precautionary protective barriers as described in Mitigation Measure 4.3-1 would prevent any incidental discharge of fill, debris, or other material into the Los Cerritos Channel and the two adjacent water supply channels and would reduce potential impacts to jurisdictional waters to less than significant levels, for both the proposed project and the Light Industrial Alternative. Therefore, the construction of the sewer line would not impact jurisdictional areas and would not be subject to agency jurisdiction.

**Cultural and Paleontological Resources.** The project impacts to historical resources were analyzed and found to be less than significant. The existing tanks on site were not found to be distinctive in their design, are not associated with events of significance, and are not likely to yield important historic information; therefore, they and the Alamitos Tank Farm as a whole are not considered important cultural resources as defined by CEQA and are not eligible for listing on the California Register of Historical Resources. Therefore, neither the proposed project nor the Light Industrial Alternative would have a significant effect on historic resources, and no mitigation is required for impacts to historical resources on site.

Impacts to paleontological resources and archaeological and prehistoric resources were analyzed. It was determined that it is unlikely that *in situ* deposits of fossiliferous sediments would be encountered during project construction. However, since there is a potential to encounter unknown paleontological resources during excavation activities, Mitigation Measure 4.4-1 was included to address potential impacts with regard to paleontological resources that may be discovered. Similarly, it was determined that there is no evidence of prehistoric use of the project site. Because the project area was originally tidal marshland, there is little potential for buried prehistoric resources, and no prehistoric resources have been previously recorded within 0.5 mile of the project area. However, since there is the possibility that human remains may be encountered during excavation activities, Mitigation Measure 4.4-2 was included to address this issue for the proposed project.

The grading limits and development limits for the Light Industrial Alternative are the same as for the proposed project; therefore, the potential project and cumulative impacts to the cultural and paleontological resources would be essentially the same for this alternative. Monitoring for archaeological and paleontological resources is not required as part of the site plan review and building permit process. Therefore, implementation of Mitigation Measures 4.4-1 and 4.4-2 cannot be guaranteed. These measures require monitoring so that in the unlikely event that resources are uncovered, they would be appropriately protected. Therefore, both project level and cumulative impacts to the cultural and paleontological resources could be adverse for the Light Industrial Alternative.

**Geology and Soils.** The project impacts to shrinkage and subsidence were analyzed and found to be less than significant. The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction. No oil exploration has been reported at the site specifically, although the site is located within the limits of the greater Seal Beach Oil Field (Mission 2004). Known ground subsidence associated with oil withdrawal was recorded in the Wilmington area, approximately 8 miles west of the site. Any historic land subsidence in the site area has been since minimized as a result of freshwater injection through the operations of the Los Alamitos Barrier project, which is located near the site. Thus, the potential site constraint associated with land subsidence is considered low, and no mitigation is required for either the proposed project or the Light Industrial Alternative.

The geologic analysis for the project identified several potentially significant geologic effects, including: seismic considerations, erosion potential, liquefaction, lateral spreading, expansive soils, and site preparation. This alternative would result in comparable grading and building activity on the

project site and similar or slightly greater building mass. Therefore, comparable geologic mitigation measures would apply. These project impacts are reduced to below a level of significance with the implementation of Mitigation Measures 4.5-1 to 4.5-3, which would be reflected in the recommendations of the geologic report required prior to the issuance of building permits.

**Hazards and Hazardous Materials.** There is the potential for significant hazardous substances impacts with implementation of the project during the construction and operation phases of the project. Risks associated with demolition, grading, and construction are essentially the same for the proposed project and the Light Industrial Alternative, since the grading limits are the same.

**Demolition and Construction.** Potential risks associated with demolition, grading, and construction include:

- Improper handling of the ASTs, pipeline conveyance systems, and their contents
- Improper handling of asbestos, lead-based paint, and PCBs in structures proposed for demolition
- Potential to disturb Tank No. 5 and supporting equipment that would remain in a 1.1-acre area in the northern portion of the site
- Detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment
- Methane
- Routine use of hazardous materials such as fuels, paints, and solvents during project construction

However, most of these activities are subject to specific local, State, and federal regulations, and compliance with these regulations is considered adequate to address potential impacts. Therefore, implementation of required actions consistent with Mitigation Measures 4.6.1 through 4.6.9 would reduce potential impacts from demolition, grading, and construction activities to less than significant levels. Completion of a detailed soils investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment. Methane was found in shallow soils above regulatory levels during a preliminary methane soil gas investigation. In order to delineate methane concentrations for the proposed project, a methane soil gas investigation is necessary after rough grading and prior to building construction and utility installation. This method of testing is appropriate because methane concentrations and methane migration would likely change during grading and site preparation. The project applicant would also be required to implement standard best management practices (BMPs) with regard to hazardous materials use during construction. Actions consistent with Mitigation Measures 4.6.1 through 4.6.6, 4.7.1, and 4.7.2 would reduce potential significant hazardous substances impacts associated with demolition, grading, excavation, and construction of the project to less than significant levels.



**Operation.** It is assumed that the Light Industrial Alternative would utilize, store, and sell hazardous materials such as solvents, paints, and pesticides at quantities generally comparable to the proposed project's home improvement store. BMPs are required to prevent pollutants from discharging into the storm drain system from the proposed development and in particular from the outdoor garden center (refer to Section 4.7, Hydrology and Water Quality). All businesses in the City of Long Beach that utilize hazardous materials above State thresholds are required to submit a Hazardous Materials Release Response Plan and Inventory to the Long Beach/Signal Hill CUPA for review and approval (Municipal Code, Chapter 8.86). Implementation of BMPs and compliance with local, State, and federal regulations regarding hazardous materials use and storage are considered adequate to address these potential hazards. Therefore, actions consistent with Mitigation Measures 4.6.7 and 4.7.4 would reduce potential impacts regarding use and storage of hazardous materials during operation of the Light Industrial to less than significant levels.

The project site is located near the AES Alamitos electrical generating plant. The plant uses a 29 percent ammonium hydroxide solution in its units for air pollution control purposes as well as other hazardous materials in its day-to-day operations.<sup>1</sup> The hazards associated with hazardous materials present at the AES facility include those commonly associated with the handling of lubricating oils, caustics, and oxidizers. Precautions against these hazards are set forth in the plant's California ARP required Risk Management Plan. Because the project would provide receptors (employees) directly adjacent to the plant, revisions to the AES facility's Risk Management Plan and Emergency Procedures may be required. Compliance with local, State, and federal regulations regarding risk management and emergency response is considered adequate to address these potential hazards. Therefore, actions consistent with Mitigation Measure 4.6.8 would reduce potential impacts from operations or emergencies at the AES facility to less than significant levels.

As stated above, the Pacific Energy-owned and operated Tank No. 5 and its associated equipment and pipelines would remain on site. There is the potential for the proposed project to inhibit access to these facilities in the event of an emergency. In addition, the Hazardous Materials Release Response Plan for this distribution system would require revisions to accommodate the relocated pipelines. Compliance with local, State, and federal regulations regarding release/spills and emergency response is considered adequate to address this potential hazard. Therefore, actions consistent with Mitigation Measure 4.6.9 would reduce potentially emergency response impacts related to these existing facilities to less than significant levels.

After construction and during ongoing operation of the project, methane could occur in elevated concentrations in subsurface soils at the site. The State has specified design features to prevent accumulation of methane in buildings. As mentioned above, these design features are subject to approval by the City of Long Beach Fire Department during final design. Actions consistent with Mitigation Measure 4.6.5 would reduce potential methane impacts with project operation to less than significant levels.

There are no schools within one-quarter mile of the project site. Kettering Elementary School is located within one-half mile of the project site and Hill Middle School is within one mile of the

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<sup>1</sup> Telephone conversation with Steve Maghy, AES Environmental Manager, June 1, 2004.

project site. Compliance with the requirements identified mitigation measures would ensure that any hazardous emissions or handling of hazardous substances or materials would not result in a significant impact to the surrounding area, including the proposed project.

**Hydrology and Water Quality.** The project site is not located within an area that is used for groundwater production, and neither the proposed project nor any of the alternatives would have a significant effect on groundwater supply. The project site is located in Zone X, which is outside of the 100-year flood hazard area.<sup>1</sup> Therefore, implementation of the project or the Light Industrial Alternative would not place structures within a 100-year flood hazard area that would impede or redirect flood flows, and no mitigation is required.

The site is subject to inspection by the RWQCB and the City during construction (General Construction Activity Permit and Municipal Code, respectively). These requirements apply to all new development, regardless of whether the project requires a discretionary approval action. Implementation of BMPs as described for the proposed project in Section 4.7 of this EIR, included in Mitigation Measures 4.7.1, 4.7.2, and 4.7.3, would reduce potential waste discharge and water quality violations related to runoff during construction to less than significant levels.

Table 4.7.E lists the operational BMPs required by the City of Long Beach under the Municipal NPDES Permit for priority development projects, including the Light Industrial Alternative. Treatment Control BMPs would be incorporated into the design of the on-site storm drain system to treat project runoff in accordance with the SUSMP standards.

In order to comply with waste discharge requirements, a SUSMP would be prepared for the Light Industrial alternative that would target control of pollutants in runoff typically produced by that land use (e.g., bacteria and viruses; nutrients; trash; oil and grease; sediment, dissolved solids, hydrocarbons, and pesticides; Table 4.7.A). In order to comply with water quality standards and prevent further degradation of water quality, the SUSMP for this alternative would address pollutants that have impaired receiving waters for the project as applicable (i.e., bacteria, ammonia, metals, pesticides, and nutrients [for algae]; Section 4.7.2). Implementation of a project SUSMP that addresses these pollutants of concern to the maximum extent practicable, and consistent with Mitigation Measure 4.7.4, would be required to reduce potential water quality impacts to a less than significant level.

Water quality modeling and calculations were conducted for the proposed project and indicated that pollutant concentrations in runoff would be lower with implementation of the proposed project compared with the existing conditions if Source Control and Treatment BMPs are implemented. This alternative would result in developed conditions, including open space, structures, and pavement, that are similar to the proposed project; therefore, similar water quality features would be required to reduce potential pollutants in surface water runoff. If this alternative incorporated comparable runoff water quality source controls, Treatment BMPs, and general project design consistent with Mitigation Measures 4.7.4 through 4.7.6, then potential operational water quality impacts would be less than significant for this alternative as well.

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<sup>1</sup> Mission GeoScience, Inc., *Engineering Geologic & Geohazards Assessment Report, Long Beach Home Depot, 400 Studebaker Road, Long Beach, California*. December 2004 (Appendix E).

A hydrology plan would be required for the Light Industrial alternative at the time building permit applications are submitted to the City. It is anticipated that the Light Industrial site design would not substantially alter the drainage pattern of the site, cause substantial erosion, or exceed the capacity of existing drainage systems.

**Land Use.** The project site is located between the Los Cerritos Channel and the San Gabriel River. The land use patterns around the project site have been established with industrial land uses to the north, south, and east and residential land uses beyond Los Cerritos Channel to the west. An infill industrial project such as the Light Industrial Alternative would be generally consistent with nearby uses. Required setbacks and landscaping, as well as the distance between residential areas and the proposed project site (approximately 550 feet) indicate that potential impacts to residential uses west of the Los Cerritos Channel are minimized.

This Alternative would result in an infill development on a parcel within an established urban community. The Light Industrial is a permitted use in Subarea 19 of the PD-1 zoning district, and no General Plan Amendment or Zone Change would be required. While the proposed project would result in the loss of 16.7 acres from the City's inventory of potential industrial land, the Light Industrial Alternative would retain the existing zoning of the site and would not deplete the City's inventory of industrially zoned land. This alternative would result in an increase in the City's inventory of industrial uses.

Short-term effects of the Light Industrial Alternative would be comparable to those of the proposed project and would occur as a result of demolition of the existing on-site tanks, site grading, and construction activity for on-site and off-site improvements. These activities would result in short-term air quality effects as described in Section 4.2, short-term noise effects as described in Section 4.9, and short-term traffic effects as described in Section 4.11. None of the surrounding land uses would experience short-term effects outside those described in those sections. Short-term noise effects are less than significant with compliance with the City's Noise Ordinance.

The extension of the sewer line across Studebaker Road and the bridge on Loynes Drive to the nearest connection point on Vista would be required for this alternative as for the proposed project and would also result in short-term construction impacts. The force main would run underground to the Loynes Drive bridge, be mounted on the bridge, and then continue underground in the street to a connection point on Vista Street. There the force main would connect with an existing eight-inch line maintained by the Long Beach Water Department. The land use effects of the extension are short-term construction impacts. An encroachment permit would be needed from the City of Long Beach for construction in City roadways, and a separate encroachment permit would be needed from the County of Los Angeles Flood Control District for construction in the Los Cerritos Channel (refer to Figure 3.6, Sewer Line Extension).

Street improvements and extension of the sewer line may have short-term traffic and noise impacts on adjoining properties. The adjoining properties are primarily residential uses that would experience noise from demolition and construction equipment as the installation progresses. It is estimated that pipe installation would be accomplished over a one-month time period, with the actual time adjacent or close to a particular property minimized. Construction activities would be required to adhere to the

City's ordinance (see Section 4.9) for noise control, and access to individual residences would not be restricted. Therefore, short-term noise impacts to each adjoining property would be brief and below a level of significance.

**Noise.** Construction-related noise is the result of site demolition, grading, and construction activities. The Light Industrial Alternative would result in demolition and grading equivalent to what is required for the proposed project. This alternative would result in greater building square footage and would require more construction activity than the proposed project. Therefore, noise from demolition and grading would be comparable to the proposed project. Noise from construction activity may occur for a longer period of time since the Light Industrial results in greater building area compared with the proposed project. Compliance with the City's Noise Ordinance (Long Beach Municipal Code Chapter 8.80) is assumed for the proposed project and for all of the alternatives. Although the Light Industrial does not require discretionary permits and therefore there would be no mechanism to ensure the implementation of mitigation measures, the noise mitigation measures are consistent with the requirements of the City's Noise Ordinance. Therefore, Mitigation Measure 4.9.2, limiting the hours of construction in accordance with the City of Long Beach's standards, would be applied to this alternative since it is a requirement of the City's Noise Ordinance. Thus, no construction activities would be permitted outside of the specified hours. There are no significant short-term noise effects related to the proposed project or any of the alternatives.

Long-term noise effects are associated with the operation of the project, including vehicular emissions and stationary source emissions. This alternative would result in fewer trips than the proposed project. Operational noise levels from traffic were calculated for this alternative and would not be appreciably different for this alternative compared with the proposed project. It is assumed that the hours of operation for this alternative would be typical business hours and not 24 hours per day. Therefore, it is not anticipated that this alternative would result in excessive nighttime traffic noise. Neither the proposed project nor the Light Industrial Alternative result in a significant operational noise impact.

**Public Services and Utilities.** There is an existing identified long-term capacity shortfall at waste disposal facilities in Los Angeles County, as described in Section 4.10 of the EIR. A high solid waste generating light industrial use is a printing press facility at 0.8 ton per employee. A 300,000-square-foot facility would be expected to accommodate 368 employees, and generate 295 tons of solid waste per year. While this is less than what would be generated by the proposed project, it represents a contribution to a potential cumulative shortfall of committed landfill area in Los Angeles County. While waste reduction measures could be implemented for this alternative, they would not be sufficient to address subregional landfill capacity issues in the long-term. Therefore, cumulative impacts of the Light Industrial Alternative associated with solid waste disposal capacity at Class III landfills would remain significant and unavoidable.

All other potential impacts to public services and utilities are anticipated to be less than significant.

**Transportation and Circulation.** A truck trip generation study conducted by the City of Fontana<sup>1</sup> was consulted to identify trip rates for light industrial use. The rates in the Fontana study are based on surveys at several light industrial facilities. Typical light industrial uses surveyed in the study include printing plants, material testing laboratories, assemblers of data processing equipment, and power stations. Based on these surveys, the City of Fontana study presents weekday peak hour trip rates for light industrial uses. To generate weekend peak hour trips, the weekday and weekend peak hour trip rates for light industrial land use from ITE's *Trip Generation* were compared to arrive at a weekend-to-weekday ratio. This ratio was applied to the weekday trip rate from the Fontana study to arrive at the weekend trip rate. Weekend in/out splits were assumed to be the same as the weekday p.m. peak hour. The trip generation associated with the Existing Zoning/Light Industrial Alternative is shown in Tables 6.M and 6.N.

To determine the amount of truck traffic that would be generated by the Existing Zoning/Light Industrial Alternative, the passenger vehicles and the truck vehicles were separated based on the trip rates provided in the City of Fontana Study. The truck mix percentages were based on percentages from the City of Fontana study. The study differentiated the truck percentages for light industrial uses based on two-axle, three-axle, and four-axle trucks. To determine the Passenger Car Equivalency (PCE) for the truck vehicles, LSA utilized PCE values from the San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP) for each classification of trucks. Based on the SANBAG CMP, LSA assumed a 1.5 PCE for two-axle, 2.0 PCE for three-axle, and 3.0 PCE for four-axle trucks. The PCE for the truck vehicles was added to the passenger vehicles to determine the total trip generation. The trip generation associated with the Existing Zoning/Light Industrial Alternative is shown in Tables 6.M and 6.N.

As shown in the tables, the Existing Zoning/Light Industrial Alternative is forecast to generate 5,216 weekday and 986 weekend daily trips, 363 a.m. peak hour, 200 p.m. peak hour and 46 weekend peak hour trips. This alternative would generate 567 fewer daily, 124 additional a.m. peak hour, 222 fewer p.m. peak hour trips, and 906 fewer weekend peak hour trips compared to the proposed project.

Vehicle trips associated with the Existing Zoning/Light Industrial Alternative would be distributed to the surrounding roadways differently than trips from a home improvement store. Vehicle trips for the Existing Zoning/Light Industrial Alternative were assigned to the roadway using the same distribution patterns discussed in the Warehouse Alternative (See Section 6.5.3).

Levels of service at the study area intersections were calculated for the Existing Zoning/Light Industrial Alternative in the 2006 weekday and weekend conditions. Table 6.O compares the weekday intersection levels of service for the Existing Zoning/Light Industrial Alternative and the 2006 baseline condition. As shown in Table 6.O, five intersections would continue to operate with unsatisfactory levels of service (LOS E or worse) with the Existing Zoning/Light Industrial Alternative. In addition, the Existing Zoning/Light Industrial Alternative would cause a significant impact to the intersection of Studebaker Road/Loynes Drive. The impact to this intersection reflects the fact that this alternative does not include the improvements from the proposed Home Depot project (i.e., construction of an additional northbound through lane on Studebaker Road), and the operational effect of increased truck activity at the intersection.

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<sup>1</sup> City of Fontana, *Truck Trip Generation Study*, August 2003.

**Table 6.M: Existing Zoning/Light Industrial Alternative Weekday Trip Generation**

	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Fontana Trip Rates <sup>1</sup> (Light Industrial)							
Passenger Cars	9.231	0.249	0.162	0.411	0.098	0.237	0.335
2 axle trucks	0.940	0.053	0.035	0.088	0.010	0.023	0.033
3 axle trucks	0.458	0.029	0.019	0.048	0.005	0.013	0.018
4+ axle trucks	1.116	0.052	0.080	0.132	0.035	0.015	0.050
Total	11.744	0.383	0.296	0.679	0.148	0.288	0.436
Trip Generation	350,000 square feet						
Passenger cars	3,231	87	57	144	34	83	117
2 axle trucks	329	19	12	31	3	8	12
3 axle trucks	160	10	7	17	2	4	6
4+ axle trucks	390	18	28	46	12	5	17
Total	4,110	134	104	238	52	101	153
PCE Trips							
Passenger cars	3,231	87	57	144	34	83	117
2 axle trucks	493	29	18	47	5	12	17
3 axle trucks	321	20	14	34	4	9	13
4+ axle trucks	1,171	54	84	138	37	15	52
Total Trucks	1,985	103	116	219	46	37	82
Total	5,216	190	173	363	80	120	200
Proposed Project <sup>2</sup>	5,783	131	108	239	206	216	422
Change in Trips from Project	-567	59	65	124	-126	-96	-222

Note: Rates are per thousand square feet.

<sup>1</sup> *Truck Trip Generation Study*, City of Fontana, August 2003.

<sup>2</sup> Project Trip Generation from Section 4.11, Traffic and Transportation.

**Table 6.N: Existing Zoning/Light Industrial Alternative Weekend Trip Generation**

	Daily	Weekend Peak Hour		
		In	Out	Total
Fontana Trip Rates <sup>1</sup> (Light Industrial)				
Passenger cars	1.745	0.054	0.023	0.077
2 axle trucks	0.178	0.005	0.002	0.008
3 axle trucks	0.087	0.003	0.001	0.004
4+ axle trucks	0.211	0.003	0.008	0.011
Total <sup>2</sup>	2.220	0.065	0.035	0.100
Trip Generation	350,000			
Passenger cars	611	19	8	27
2 axle trucks	62	2	1	3
3 axle trucks	30	1	0	1
4+ axle trucks	74	1	3	4
Total	777	23	12	35
PCE Trips				
Passenger cars	611	19	8	27
2 axle trucks	93	3	1	4
3 axle trucks	61	2	1	3
4+ axle trucks	221	4	8	12
Total Trucks	375	8	10	19
Total	986	27	18	46
Proposed Project <sup>3</sup>	8,503	513	439	952
Change from Project Trips	-7,517	-486	-421	-906

Note: Rates are per thousand square feet.

<sup>1</sup> *Truck Trip Generation Study*, City of Fontana, August 2003.

Classification: Light Industrial

<sup>2</sup> Trip Rates for Light Industrial based on comparison of the City of Fontana, Truck Trip Generation Study, August 2003 and the Institute of Transportation Engineers, Trip Generation, 7th Edition (2003).

<sup>3</sup> Project Trip Generation from Section 4.11, Traffic and Transportation.

**Table 6.O: 2006 Plus Existing Zoning/Light Industrial Alternative Weekday Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions				2006 Plus Existing Zoning/ Light Industrial Alternative				Change in ICU		Exceeds City Significance Threshold	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	AM	PM
1	Studebaker Rd/SR-22 WB ramps	0.711	C	1.022	F	0.739	C	1.034	F	0.028	0.012	N	N
2	Studebaker Rd/SR-22 EB ramps	0.608	B	0.870	D	0.640	B	0.883	D	0.032	0.013	N	N
3	Studebaker Rd/AES Plant driveway	0.637	B	0.819	D	0.666	B	0.839	D	0.029	0.020	N	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.867	D	0.872	D	<b>0.979</b>	<b>E</b>	<b>0.932</b>	<b>E</b>	0.112	0.060	<b>Y</b>	<b>Y</b>
5	Studebaker Rd/2nd Street	0.965	E	0.984	E	0.978	E	0.990	E	0.013	0.006	N	N
6	PCH/7th Street (CMP)	1.197	F	1.306	F	1.205	F	1.311	F	0.008	0.005	N	N
7	PCH/Bellflower Blvd	0.707	C	0.830	D	0.718	C	0.835	D	0.011	0.005	N	N
8	PCH/Loynes Dr	0.730	C	0.863	D	0.762	C	0.863	D	0.032	0.000	N	N
9	PCH/2nd Street (CMP)	0.933	E	1.057	F	0.942	E	1.061	F	0.009	0.004	N	N
10	PCH/Studebaker Rd	0.895	D	1.319	F	0.897	D	1.321	F	0.002	0.002	N	N
11	Bixby Village Rd/Loynes Dr	0.251	A	0.413	A	0.265	A	0.423	A	0.014	0.010	N	N

Notes:

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions. CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.



Table 6.P compares the weekend intersection levels of service for the Existing Zoning/Light Industrial Alternative and the 2006 baseline condition. As shown in Table 6.P, although four intersections would continue to operate with unsatisfactory levels of service (LOS E or worse) with the Existing Zoning/Light Industrial Alternative, this alternative would not significantly impact any study area intersections during the weekend peak hour.

When compared to the project impact analysis, the Existing Zoning/Light Industrial Alternative would result in one fewer significant impact during the weekday peak hours. The intersections of Studebaker Road/SR-22 westbound Ramps and Studebaker Road/2nd Street would be significantly impacted by the proposed project, but would not experience significant impacts with the Existing Zoning/Light Industrial Alternative. However, the intersection of Studebaker Road/Loynes Drive would be significantly impacted in the Existing Zoning/Light Industrial Alternative. During the weekend peak hour, the Existing Zoning/Light Industrial Alternative would result in three fewer significant impacts. The intersections of Studebaker Road/2nd Street, PCH/7th Street, and PCH/2nd Street would be significantly impacted by the proposed project, but would not experience significant impacts with the Existing Zoning/Light Industrial Alternative.

Table 6.Q provides a comparison of the levels of service with the proposed project and with the Existing Zoning/Light Industrial Alternative. As shown in Table 6.Q, the intersection of Studebaker Road/Loynes Drive (the project driveway) would operate at a lower level of service during the weekday peak hours with the Existing Zoning/Light Industrial Alternative than with the proposed project. As discussed under the Warehouse Alternative, with the proposed project, protected-permissive left-turn phasing would be implemented at this intersection. Protected-permissive left-turn phasing allows left turns during a left green arrow phase as well as during the regular green phase, traffic conditions permitting. The Existing Zoning/Light Industrial Alternative would be characterized by truck traffic. Truck traffic is usually limited to left turns during a protected left-turn (left green arrow) only, for safety reasons. Therefore, a fewer number of left-turning vehicles would be accommodated during each signal phase. As a result, only protected left-turns are provided in the Existing Zoning/Light Industrial Alternative, which would result in less efficient operation of the northbound and southbound left-turn movements because less left-turning capacity would be available during each signal cycle.

The remaining study area intersections are forecast to operate within 0.01 of the proposed project ICU during the a.m. peak hour. Because the overall a.m. peak-hour trip generation is almost identical to the proposed project, the changes to the ICU values are mostly due to differences in the in/out split and the trip distribution associated with the Existing Zoning/Light Industrial Alternative land use. During the p.m. peak hour and the weekend peak hour, the study area intersections would operate with the same or better levels of service than with the proposed project.

#### **6.6.4 Summary for Alternative 4**

The Light Industrial Alternative would not avoid the significant unavoidable adverse impacts of the proposed project related to construction air quality and cumulative project impacts associated with solid waste disposal capacity at Class III landfills. This alternative would result in significant operational air quality effects and would therefore not avoid this significant project-related effect. The

**Table 6.P: 2006 Plus Existing Zoning/Light Industrial Alternative Weekend Intersection Level of Service Summary**

Intersection		2006 Baseline (No Project) Conditions		2006 Weekend Plus Existing Zoning/Light Industrial Alternative		Change in ICU	Exceeds City Significance Threshold
		Weekend Peak Hour		Weekend Peak Hour			
		ICU	LOS	ICU	LOS		
1	Studebaker Rd/SR-22 WB ramps	0.746	C	0.750	C	0.004	N
2	Studebaker Rd/SR-22 EB ramps	0.656	B	0.665	B	0.009	N
3	Studebaker Rd/AES Plant driveway	0.660	B	0.664	B	0.004	N
4	Studebaker Rd/Loynes Dr <sup>1</sup>	0.729	C	0.732	C	0.003	N
5	Studebaker Rd/2nd Street	0.936	E	0.938	E	0.002	N
6	PCH/7th Street (CMP)	0.910	E	0.911	E	0.001	N
7	PCH/Bellflower Blvd	0.744	C	0.746	C	0.002	N
8	PCH/Loynes Dr	0.840	D	0.840	D	0.000	N
9	PCH/2nd Street (CMP)	0.991	E	0.993	E	0.002	N
10	PCH/Studebaker Rd	1.189	F	1.189	F	0.000	N
11	Bixby Village Rd/Loynes Dr	0.290	A	0.291	A	0.001	N

**Notes:**

Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions. CMP = Los Angeles County CMP Monitoring Intersection

<sup>1</sup> Improvements to intersection included with project design.

**Table 6.Q: Comparison of Light Industrial Alternative with Proposed Project**

Intersection	Weekday Peak Hour Conditions									
	2006 Plus Project				2006 Plus Light Industrial Alternative				Change in ICU with Light Industrial Alternative	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU Change	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.725	C	<b>1.045</b>	<b>F</b>	0.739	C	1.034	F	0.014	-0.011
2. Studebaker Rd/SR-22 EB ramps	0.626	B	0.898	D	0.640	B	0.883	D	0.014	-0.015
3. Studebaker Rd/AES Plant driveway	0.651	B	0.849	D	0.666	B	0.839	D	0.015	-0.010
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.673	B	0.858	D	<b>0.979</b>	<b>E</b>	<b>0.932</b>	<b>E</b>	0.306	0.074
5. Studebaker Rd/2nd Street	0.975	E	<b>1.002</b>	<b>F</b>	0.978	E	0.990	E	0.003	-0.012
6. PCH/7th Street (CMP)	1.201	F	1.313	F	1.205	F	1.311	F	0.004	-0.002
7. PCH/Bellflower Blvd	0.715	C	0.844	D	0.718	C	0.835	D	0.003	-0.009
8. PCH/Loynes Dr	0.753	C	0.864	D	0.762	C	0.863	D	0.009	-0.001
9. PCH/2nd Street (CMP)	0.941	E	1.066	F	0.942	E	1.061	F	0.001	-0.005
10. PCH/Studebaker Rd	0.896	D	1.322	F	0.897	D	1.321	F	0.001	-0.001
11. Bixby Village Rd/Loynes Dr	0.267	A	0.438	A	0.265	A	0.423	A	-0.002	-0.015

Intersection	Weekend Peak Hour Conditions				
	2006 Plus Project		2006 Plus Light Industrial Alternative		Change in ICU with Light Industrial Alternative
	ICU	LOS	ICU	LOS	ICU Change
1. Studebaker Rd/SR-22 WB ramps	0.805	B	0.750	C	-0.055
2. Studebaker Rd/SR-22 EB ramps	0.732	C	0.665	B	-0.067
3. Studebaker Rd/AES Plant driveway	0.730	C	0.664	B	-0.066
4. Studebaker Rd/Loynes Dr <sup>1</sup>	0.809	B	0.732	C	-0.077
5. Studebaker Rd/2nd Street	<b>0.980</b>	<b>E</b>	0.938	E	-0.042
6. PCH/7th Street (CMP)	<b>0.938</b>	<b>E</b>	0.911	E	-0.027
7. PCH/Bellflower Blvd	0.795	C	0.746	C	-0.049
8. PCH/Loynes Dr	0.840	D	0.840	D	0.000
9. PCH/2nd Street (CMP)	<b>1.020</b>	<b>F</b>	0.993	E	-0.027
10. PCH/Studebaker Rd	1.195	F	1.189	F	-0.006
11. Bixby Village Rd/Loynes Dr	0.331	A	0.291	A	-0.040

Note: Shaded boxes represent significant impacts based on a change in ICU to LOS E or F or an increase in ICU of 0.020 or greater for LOS E or F conditions.

<sup>1</sup>Improvements to intersection included with project design.

Light Industrial Alternative would result in a significant traffic effect at the project driveway (Loynes Drive and Studebaker Road). This significant effect could be avoided with implementation of the project feature of adding a travel land to Studebaker Road between Loynes Drive and SR-22. This project feature was not assumed to be implemented for this analysis.

The Existing Zoning/Light Industrial Alternative would be generally consistent with Project Objectives 2 through 4, which call for a comprehensive site development, economical reuse of the site, and the transition of the site from underutilized industrial property to a use that provides job and promotes economic revitalization. This alternative would not provide a conveniently located commercial retail center that includes a home improvement store as well as other retail center amenities that serve the needs of local residents and businesses (Objective 1). Also, the Light Industrial Alternative would provide property tax to the City of Long Beach, but would not supplement the City's sales tax revenues (Objective 5).

## **6.7 COMPARISON OF ALL ALTERNATIVES**

As stated in Section 6.1, the primary objective of the alternatives analysis is to focus on alternatives capable of eliminating identified, unmitigated, significant environmental effects, or reducing them to a level of insignificance, even if those alternatives would not attain the basic project objectives or are more costly. Table 6.R provides a matrix comparison of each alternative and indicates whether the proposed alternatives have similar, greater, or fewer impacts than the proposed project. Each alternative has a different combination of effects that are similar to, greater than, or less than the proposed project.

## **6.8 IDENTIFICATION OF AN ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

The No Project/No Development Alternative is environmentally superior to the proposed project because there are no physical impacts that would result from implementation of this alternative. If there were no changes to the existing conditions on the site, there would be no increase in traffic, noise, construction or operational air emissions, or solid waste generation; however, there are projected changes with the proposed project. The CEQA Guidelines require that if the environmentally superior alternative is the No Project Alternative, "the EIR also identify an environmentally superior alternative among the other alternatives" (CEQA Guidelines Section 15126.6[e][2]).

The operational effects of the proposed project and Reduced Project Alternative, which are retail uses, and the operational effects of the two existing zoning alternatives, which are industrial uses, are qualitatively different. The retail uses generally result in increased traffic and related air quality and noise effects on the weekends, compared with the light industrial uses. (Although the Warehouse is assumed to be a six-day-a-week facility, it does not result in any significant peak-hour traffic impacts on the weekend.) The traffic generated by the Warehouse and Light Industrial uses would be characterized by a greater percentage of truck trips compared with the retail alternatives (proposed project and Reduced Project Alternative). Although the Light Industrial use generates more truck trips than the Warehouse, there are fewer peak-hour trips associated with the Light Industrial Alternative and therefore the impacts to the SR-22 ramp are avoided. The distribution of the trips generated by

**Table 6.R: Home Depot East Long Beach Comparison of Impacts for Alternatives**

	<b>Proposed Project</b>	<b>Alternative 1: No Project/No Development</b>	<b>Alternative 2: Reduced Project Alternative</b>	<b>Alternative 3: Warehouse</b>	<b>Alternative 4: Existing Zoning/ Light Industrial</b>
Attainment of Project Objectives	Meets all project objectives	Meets none of the project objectives	Meets most of the project objectives	Meets Objectives 2, 3, and 4	Meets Objectives 2, 3, and 4
Aesthetics	NS	—	—	N	N
Air Quality	S	—	—	—	N
Biological Resources	NS	—	N	N	N
Cultural and Paleontological Resources	NS	—	N	+ <sup>1</sup>	+ <sup>1</sup>
Geology and Soils	NS	—	N	N	N
Hazards and Hazardous Materials	NS	—	N	N	N
Hydrology and Water Quality	NS	—	N	N	N
Land Use and Planning	NS	—	N	—	—
Noise	NS	—	N	N	N
Public Services and Utilities	S	—	—	—	—
Transportation and Circulation	S	—	—	—	—

For proposed project impacts:

S = Significant Unavoidable Impacts

NS = No Significant Impact with Mitigation Incorporated

For project alternative impacts:

+ = Greater impacts compared to proposed project

— = Less or incrementally fewer impacts compared to the proposed project

N = Neutral (doesn't appreciably change impacts)

<sup>1</sup> The potential for cultural or paleontological resources to be present on site is very low; however, monitoring for these resources is not guaranteed to occur with Alternatives 3 and 4.

the retail and industrial alternatives is different, as it is assumed that most of the trips associated with the industrial uses would be via Studebaker Road and the SR-22 connection. The truck trips associated with the two industrial alternatives have been converted to passenger car equivalent units (PCEs) to better capture the nature of the impacts on local traffic conditions. The trips as expressed in PCEs were also used as the basis of the air quality and noise analyses for the industrial alternatives.

The Reduced Project Alternative would not result in any significant weekday traffic impacts and, in this regard, is superior to the proposed project, which would result in significant impacts at two intersections even after mitigation. The Warehouse Alternative would result in significant weekday impacts at two intersections: the project driveway at Studebaker and Loynes and the SR-22 ramps. The Light Industrial Alternative would only result in one significant impact during the weekday peak hours.

Weekend traffic impacts of each of the alternatives are slightly different than the weekday effects. The proposed project would significantly affect three intersections during the weekend peak hours, and the Reduced Project Alternative would significantly affect two intersections. Neither the Warehouse nor the Light Industrial Alternative would result in significant impacts to intersections during the weekend peak hours. Therefore, the industrial alternatives are considered environmentally superior for weekend traffic effects.

The Reduced Project Alternative is superior with regard to weekday traffic impacts, and the two industrial alternatives (Warehouse and Light Industrial) are superior with regard to weekend traffic impacts. In terms of the combined number of significantly affected intersections for both weekday and weekend, the Light Industrial Alternative is superior (see Table 6.S).

**Table 6.S: Summary of Significant Traffic Impacts of Alternatives**

	Number of Significantly Affected Intersections		
	Weekday	Weekend	Total
Proposed Project	2	3	5
Reduced Project Alternative	0	2	2
Warehouse Alternative	2	0	2
Light Industrial Alternative	1	0	1

In terms of operational air quality emissions, the Warehouse Alternative is the environmentally superior alternative, as it does not result in any significant effects. The Reduced Project Alternative results in significant effects as a result of CO and NO<sub>x</sub> emissions, and the Light Industrial Alternative results in significant effects as a result of CO, ROC, and NO<sub>x</sub> emissions.

Other impacts associated with the proposed project would not be reduced with alternative development scenarios. For example, short-term air quality and hazardous impacts as a result of demolition and grading would not vary substantially under any of the build alternatives. Geologic and hydrologic requirements would also be very similar for all of the build alternatives.

The Reduced Project Alternative would reduce the number of, but not completely avoid, significant project-related impacts to traffic and operational air quality. The trip generation of the Reduced Project Alternative is less than the proposed project trip generation for both the weekday and weekend peak hours. The Reduced Project Alternative would result in two fewer significantly impacted intersections during the weekday peak hours and one fewer impacted intersection in the weekend peak hour compared with the proposed project. All study area intersections would operate with an improved or equivalent level of service with implementation of the Reduced Project Alternative compared with the proposed project. The Reduced Project Alternative also results in fewer significant air quality effects compared to the proposed project and Light Industrial Alternative. Therefore, this alternative has less direct physical effects on the environment. However, as seen below, this alternative has greater traffic circulation impacts.

Development under the Light Industrial Alternative would preclude the need for discretionary permits such as a Conditional Use Permit. Although operational air quality effects are greater under this alternative compared with the Warehouse Alternative and Reduced Project Alternative, significant traffic impacts are fewer overall with the Light Industrial Alternative because a fewer number of intersections would be significantly, adversely impacted compared with the other alternatives. The remaining significant effect, at Studebaker Road and Loynes Drive (the project drive) could be reduced to below a level of significance with the implementation of mitigation and/or project features. The Light Industrial Alternative also results in the smallest impact to cumulative solid waste conditions in Los Angeles County compared with the proposed project and other build alternatives.

Development under the Warehouse Alternative would also preclude the need for discretionary permits such as a Conditional Use Permit. Significant operational air quality effects are avoided under this alternative, and significant traffic impacts are similar to the Reduced Project Alternative. The Reduced Project Alternative, however, has significant traffic effects during the weekend peak hour, and the Warehouse Alternative has significant effects during the weekday peak hour.

Because the Reduced Project Alternative has an impact to weekend peak hours greater than the Warehouse or Light Industrial Alternatives, there is no clearly evident "environmentally superior" alternative.

## **7.0 MITIGATION MONITORING AND REPORTING PROGRAM**

### **7.1 MITIGATION MONITORING REQUIREMENTS**

Public Resources Code Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.



## **7.2 MITIGATION MONITORING PROCEDURES**

The mitigation monitoring and reporting program has been prepared in compliance with Public Resources Code Section 21081.6. It describes the requirements and procedures to be followed by the City of Long Beach to ensure that all mitigation measures adopted as part of the proposed Home Depot project will be carried out as described in this EIR.

Table 7.A lists each of the mitigation measures specified in this EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

**Table 7.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.1 Aesthetics</b>		
<b>4.1.1</b> The preliminary lighting plan shall be finalized as part of subsequent refinements in the site master planning process. The plan shall be designed to prevent light spillage in excess of that which has been referenced and analyzed in this EIR. A qualified lighting engineer/consultant to the City of Long Beach Department of Planning and Building shall verify that the plan calls for energy-efficient luminaries that control light energy and for exterior lighting to be directed downward and away from adjacent streets and adjoining land uses in a manner designed to minimize off-site spillage. Prior to issuance of building permits, the lighting plan shall be reviewed and approved by a City of Long Beach Director of Planning and Building, demonstrating that project lighting is consistent with this EIR.	City of Long Beach Director of Planning and Building	Prior to issuance of building permits
<b>4.1.2</b> Prior to issuance of certificates of occupancy, a City of Long Beach Building Official shall verify that the lighting plan restricts operational hours as follows: 100 percent illumination from dusk to close of commercial activities; 50 percent illumination from the close of commercial activities until one hour after close time; and only security-level lighting from one hour after closure until dawn.	City of Long Beach Building Official	Prior to issuance of certificates of occupancy
<b>4.2 Air Quality</b>		
<b>4.2.1</b> The City of Long Beach shall ensure that the project complies with SCAQMD Rule 1166 with regard to the handling of potential VOC-contaminated soils during construction. Prior to issuance of building permits, the City of Long Beach Building Official shall verify that construction plans include a statement stipulating that the construction contractor shall be responsible for compliance with applicable SCAQMD Rules and Regulations.	City of Long Beach Building Official/ Construction Contractor	Verification: Prior to issuance of building permits  Activity: Ongoing during grading or earth-clearing activities
<b>4.2.2</b> The City of Long Beach shall ensure that the project complies with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control	City of Long Beach Building Official/	Verification: Prior to issuance of grading and building permits

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. The City of Long Beach Building Official shall ensure that notes are included on grading and construction plans and referenced in the Construction Contractor's Agreement stipulating that the construction contractor shall be responsible for compliance with SCAQMD Rules 402 and 403.</p> <p>Applicable Rule 403 measures include the following requirements:</p> <ul style="list-style-type: none"> <li>• Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).</li> <li>• Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)</li> <li>• All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).</li> <li>• Pave construction access roads at least 100 feet onto the site from the main road.</li> <li>• Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.</li> </ul>	Construction Contractor	Activity: Ongoing during grading or construction activities
<p><b>4.2.3</b> The City of Long Beach Building Official shall ensure that construction documents and the Construction Contractor's Agreement require use of dust suppression measures in the SCAQMD <i>CEQA Air Quality Handbook</i> during</p>	City of Long Beach Building Official/	Verification: Prior to issuance of grading or building permits

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>grading and construction. The construction contractor shall be responsible for implementation of dust suppression measures.</p> <ul style="list-style-type: none"> <li>• Revegetate disturbed areas as quickly as possible.</li> <li>• All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.</li> <li>• All streets shall be swept once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).</li> <li>• Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.</li> <li>• All on-site roads shall be paved as soon as feasible, watered periodically, or chemically stabilized.</li> <li>• The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.</li> </ul>	Construction Contractor	Activity: Ongoing during grading and construction activities
<p><b>4.2.4</b> The construction contractor shall select the construction equipment used on site based on low-emission factors and high energy efficiency. Prior to issuance of grading and building permits, the City of Long Beach Building Official shall verify that grading and construction plans include a statement that all construction equipment will be tuned and maintained in accordance with manufacturers' specifications.</p>	City of Long Beach Building Official/ Construction Contractor	<p>Verification: Prior to issuance of grading and construction permits</p> <p>Activity: Ongoing during grading or construction activities</p>
<p><b>4.2.5</b> Prior to issuance of grading permits, the City of Long Beach Building Official shall verify that construction and grading plans include a statement that the construction contractor shall utilize electric- or diesel-powered equipment in lieu of gasoline-powered engines where feasible.</p>	City of Long Beach Building Official/ Construction Contractor	<p>Verification: Prior to issuance of grading permits</p> <p>Activity: Ongoing during grading or construction activities</p>
<p><b>4.2.6</b> Prior to issuance of grading and building permits, the City of Long Beach Building Official shall verify that grading and construction plans include a statement that work crews will shut off equipment when not in use. During</p>	City of Long Beach Building Official/	Verification: Prior to issuance of grading and building permits

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.	Construction Contractor	Activity: Ongoing during grading or construction activities
<b>4.2.7</b> Prior to issuance of grading permits, the City of Long Beach Building Official shall verify that construction and grading plans include a statement stipulating that the construction contractor shall time construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through-traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.	City of Long Beach Building Official/ Construction Contractor	Verification: Prior to issuance of grading permits  Activity: Ongoing during grading or construction activities
<b>4.2.8</b> Prior to issuance of grading permits, the City of Long Beach Building Official shall verify that construction and grading plans include a statement stipulating that the construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.	City of Long Beach Building Official/ Construction Contractor	Verification: Prior to issuance of grading permits  Activity: Ongoing during grading or construction activities
<b>4.2.9</b> The City of Long Beach shall ensure that the project complies with Title 24 of the California Code of Regulations established by the Energy Commission regarding energy conservation standards. During Plan Check, the City of Long Beach Building Official shall verify that the following measures are incorporated into project building plans:  <ul style="list-style-type: none"> <li>• Trees will be planted to provide shade and shadow to buildings</li> <li>• Energy-efficient parking lot lights, such as low-pressure sodium or metal halide, will be used</li> <li>• Solar or low-emission water heaters shall be used with combined space/water heater units where feasible</li> <li>• Double-paned glass or window treatment for energy conservation shall be used in all exterior windows where feasible</li> <li>• Buildings shall be oriented north/south where feasible</li> </ul>	City of Long Beach Building Official/ Construction Contractor	During Plan Check

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.3 Biological Resources</b>		
<p><b>4.3.1</b> Prior to commencement of demolition or grading activities, the construction contractor shall install protective barriers (e.g., snow or silt fencing) between the project site and the adjacent water supply channels and along both banks of the Los Cerritos Channel north of the Loynes Drive bridge. Prior to issuance of demolition permits, the City of Long Beach Environmental Officer shall verify that a qualified biologist has been retained by the City of Long Beach to supervise the installation of the barriers and ensure that the barriers are installed in the proper location and are clearly visible to equipment operators and other construction personnel. The barriers shall be a bright color (e.g., fluorescent orange) to ensure clear visibility. No construction activity shall occur beyond the limits marked by the barriers, and the construction contractor shall ensure that no construction debris, trash, or other material passes beyond the barriers. The City-retained biologist shall monitor the site on a weekly basis throughout project construction and file written reports on the condition of the barriers to the City of Long Beach Environmental Officer on a monthly basis. The cost of the biologist shall be reimbursed by the applicant.</p>	City of Long Beach Environmental Officer	<p>Verification: Prior to issuance of any demolition permits</p> <p>Activity: Ongoing during demolition, grading, and construction activities</p>
<b>4.4 Cultural Resources</b>		
<p><b>4.4.1</b> In conjunction with the submittal of applications for rough grading permits for the proposed project, the City of Long Beach Director of Planning and Building shall verify that a paleontologist who is listed on the County of Los Angeles list of certified paleontologists has been retained and will be on site during all rough grading and other significant ground-disturbing activities in paleontologically sensitive sediments. In the event that fossil resources are noted within the project area, construction in the vicinity of the find will be halted until the discovery can be evaluated. If the discovery is determined to be important, the project proponent shall initiate a paleontological recovery program to collect the fossil specimens and all relevant lithologic and locality information about the specimen. This may include the collection and the washing and picking of up to 6,000 pounds per locality of mass samples to recover small invertebrate and</p>	City of Long Beach Director of Planning and Building	<p>Verification: Prior to issuance of grading permits</p> <p>Activity: Ongoing during grading or earth-clearing activities</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
vertebrate fossils. The results of the fossil recovery program will be documented in a technical report that will include an itemized inventory of specimens. Specimens recovered during grading activity shall be prepared to a point of identification and permanent preservation. All recovered fossils shall be placed within a museum repository that is capable of accepting the recovered fossils and that has a permanent retrievable storage. The project proponent shall be responsible for all costs associated with this recovery program and report preparation.		
<b>4.4.2</b> If human remains are encountered, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of the human remains and items associated with Native American burials.	City of Long Beach Director of Planning and Building/ Construction Contractor	Triggered if human remains are found on the project site; the Orange County Coroner must be notified immediately
<b>4.5 Geology and Soils</b>		
<b>4.5.1</b> Prior to issuance of building permits, the City of Long Beach Building Official (or designee) and the City of Long Beach Director of Public Works are required to review and approve final design plans to ensure that earthquake-resistant design has been incorporated into final site drawings in accordance with the most current California Building Code and the recommended seismic design parameters of the Structural Engineers Association of California. Ultimate site seismic design acceleration shall be determined by the project structural engineer during the project design phase.	City of Long Beach Building Official/City of Long Beach Director of Public Works	Prior to issuance of building permits

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p><b>4.5.2</b> A detailed geotechnical investigation of the site shall be conducted prior to the project design phase. This investigation shall evaluate liquefaction potential, lateral spreading hazards, and soil expansiveness and shall determine appropriate design consistent with the most current California Building Code. A corrosion engineer shall design measures for corrosion protection. Site-specific final design evaluation and grading plan review shall be performed by the project geotechnical consultant prior to the start of grading to verify that recommendations developed during the geotechnical design process are appropriately incorporated in the project plan. Design and grading construction shall be performed in accordance with the requirements of the California Building Code applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final report, subject to review by the City of Long Beach Building Official prior to issuance of grading permits.</p>	<p>City of Long Beach Building Official</p>	<p>Prior to issuance of grading permits</p>
<p><b>4.5.3</b> Site preparation (removal of existing facilities, excavation, subgrade preparation, placement and compaction of fill, foundation preparation, floor slab preparation, positive surface gradient preparation, and pavement of other areas) shall be conducted consistent with the recommendations of the design-level detailed geotechnical investigation summarized in a final report, subject to review and approval by a City of Long Beach Building Official prior to issuance of grading permits. The project geotechnical engineer shall observe all excavations, subgrade preparation, and fill activities and shall conduct soils testing as necessary, consistent with local, State, and federal regulations.</p>	<p>City of Long Beach Building Official</p>	<p>Prior to issuance of grading permits</p>
<p><b>4.6 Hazardous Materials</b></p>		
<p><b>4.6.1</b> Prior to issuance of any demolition permits, the project applicant shall submit an application to the City of Long Beach Fire Department for approval to remove Tanks Nos. 1–4 and 6 and associated pipeline conveyance systems from the property. The application package shall include documentation of approval of the removal process by AES Alamitos and Pacific Energy. The City of Long Beach Fire Department shall review the application for compliance with local,</p>	<p>City of Long Beach Fire Chief</p>	<p>Prior to issuance of any demolition permits</p>



Mitigation Measures	Responsible Party	Timing for Mitigation Measure
State, and federal requirements with tank-handling procedures including sampling and disposal of tank contents, sampling of subsurface soils, and transport and disposal of tanks and soils/liquids. The City of Long Beach Fire Department shall oversee and monitor the operation in accordance with local, State, and federal requirements.		
<b>4.6.2</b> Prior to issuance of any demolition permits, predemolition surveys for ACMs and LBPs (including sampling and analysis of all suspected building materials) and inspections for PCB-containing electrical fixtures shall be performed. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e.: ASTM E 1527-00, and 40 CFR, Subchapter R, Toxic Substances Control Act [TSCA], Part 716). All identified ACMs, LBPs, and PCB-containing electrical fixtures shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, and 763). Air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., SCAQMD) and to provide safety to workers and the adjacent community. The project applicant shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the City of Long Beach Health Department showing that abatement of any ACMs, LBPs, or PCB-containing electrical fixtures identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, and 795 and CCR Title 8, Article 2.6). An Operating & Maintenance Plan (O&M) shall be prepared for any ACM, LBP, or PCB-containing fixtures to remain in place and will be reviewed and approved by the City Health Department.	City of Long Beach Department of Health	Prior to issuance of any demolition permits
<b>4.6.3</b> Prior to issuance of any demolition permits, the project applicant shall submit an Emergency Action Plan to the City of Long Beach Fire Department for	City of Long Beach Fire Chief	Prior to issuance of any demolition permits

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>review and approval. The plan shall include documentation of review and approval by Pacific Energy. The plan shall be consistent with local, State, and federal regulations and shall provide detailed procedures in the event of a hazardous substance leak or spill from on-site facilities, including Tank No. 5 and associated equipment.</p>		
<p><b>4.6.4</b> Prior to issuance of a grading permit and after removal of the ASTs, pipeline conveyance systems, and hazardous materials storage shed, a detailed soil matrix investigation workplan shall be submitted by the project applicant to the Long Beach/Signal Hill CUPA for review and approval. The workplan shall include sampling for petroleum hydrocarbons and California Code of Regulations Title 22 metals, at a minimum, beneath the former footprints of the above facilities. The purpose of the investigation is to confirm the previously reported remediation at Tank No. 3 and to delineate the reported soil impact around and beneath Tank Nos. 1, 2, and 4. The workplan shall also include an assessment of the area beneath the concrete sump to determine whether the shallow soils have been impacted as a result of its previous operation. The Long Beach/Signal Hill CUPA will determine whether groundwater sampling is required.</p> <p>Within the areas of the ASTs and the hazardous material storage facility, continuous core samples of soil should be collected from borings advanced on a 50-foot grid spacing. Continuous core samples of soil should be collected from borings advanced every 100 feet along pipelines and at significant pipeline joints and terminations. Two borings should be advanced beneath the sump to collect continuous core samples of soil. Each core sample should be examined in detail by a California registered geologist experienced and qualified to perform hazardous waste investigations for indications of chemical impact. Samples of the cores indicating suspected impact (from the surface and each five-foot depth thereafter, if not visually impacted) should be retained and analyzed for petroleum hydrocarbons and Title 22 metals at a minimum by a</p>	<p>Long Beach/ Signal Hill CUPA</p>	<p>Prior to issuance of a grading permit</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>laboratory with a California Department of Health Services Environmental Laboratory Accreditation Program (DOHS-ELAP) Certifications for the analysis performed.</p> <p>The Long Beach/Signal Hill CUPA shall review the workplan and shall list any additional requirements. Implementation of the workplan shall be overseen by the Long Beach/Signal Hill CUPA for compliance with local, State, and federal regulations. Any additional sampling or soil or groundwater removal shall be subject to these same regulations. After remediation activity is completed to the satisfaction of the Long Beach/Signal Hill CUPA or the Regional Water Quality Control Board (RWQCB) (if groundwater was encountered), a No Further Action letter is to be issued prior to the commencement of rough grading.</p>		
<p><b>4.6.5</b> After rough grading and prior to building construction and utility installation, a detailed methane soil gas investigation workplan shall be prepared by the project applicant and submitted to the City of Long Beach Fire Department for review and approval. The methane soil gas investigation shall be performed in accordance with local industry standards. The results shall be presented in a formal report that includes recommendations to mitigate potential hazards from methane, if required. The report shall be reviewed and approved by the City of Long Beach Fire Department. Based on the results of this detailed investigation, additional mitigation design may be necessary, including providing conventional vapor barriers and venting systems beneath buildings and confined spaces. Methane mitigation design shall be approved by the City of Long Beach Fire Department.</p>	City of Long Beach Fire Chief	After rough grading and prior to building construction and utility installation
<p><b>4.6.6</b> Prior to issuance of a grading permit, the project applicant shall submit a Soil and Air Monitoring Program and associated Health and Safety Plan to the City of Long Beach Planning and Building Department and the SCAQMD for review and approval. The project shall include documentation of review and approval by AES Alamitos and Pacific Energy. The program shall be consistent with local, State, and federal regulations and shall encompass all</p>	City of Long Beach Director of Planning and Building	Prior to issuance of a grading permit

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>soil-disturbance activities. The Health and Safety Plan shall include the following components:</p> <ul style="list-style-type: none"> <li>• A summary of all potential risks to construction workers, monitoring programs, maximum exposure limits for all site chemicals, and emergency procedures</li> <li>• The identification of a site health and safety officer</li> <li>• Methods of contact, phone number, office location, and responsibilities of the site health and safety officer</li> <li>• Specification that the site health and safety officer will be contacted immediately by the construction contractor should any potentially toxic chemical be detected above the exposure limits or if evidence of soil contamination is encountered during site preparation and construction</li> <li>• Specification that the Long Beach/Signal Hill CUPA will be notified if evidence of soil contamination is encountered</li> <li>• Specification that an on-site monitor will be present to perform monitoring and/or soil and air sampling during grading, trenching, or cut or fill operations</li> </ul> <p>The Health and Safety Plan shall be provided to all contractors on site. The Health and Safety Plan is required to be amended as needed if different site conditions are encountered by the site health and safety officer.</p>		
<p><b>4.6.7</b> Prior to application for a business license and/or certificate of occupancy, the project applicant shall submit a Hazardous Materials Release Response Plan and Inventory to Long Beach/Signal Hill CUPA for approval and permit if the site will store or utilize quantities of hazardous materials above regulatory limits. The Long Beach/Signal Hill CUPA shall determine whether any additional plans regarding hazardous materials are necessary.</p>	<p>Long Beach/Signal Hill CUPA</p>	<p>Prior to application for a business license and/or certificate of occupancy</p>

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.6.8</b> Prior to issuance of certificates of occupancy, the City of Long Beach Health Department and the Long Beach/Signal Hill CUPA shall review the existing Business Emergency Plan, Hazardous Materials Release Response Plan and Inventory, and the Risk Management Plan for the AES Alamitos Plant and shall determine whether additional measures/revisions are necessary based on proposed project implementation, consistent with the California Health and Safety Code Section 25500, et seq. The City of Long Beach Police Department shall review the plans to determine whether security for the plant, tanks, and distribution system is in compliance with pertinent regulations.	City of Long Beach Health Department/ Long Beach/ Signal Hill CUPA	Prior to issuance of certificates of occupancy
<b>4.6.9</b> Prior to issuance of certificates of occupancy, the applicant shall submit the updated Hazardous Materials Release Response Plan and Inventory for the Pacific Energy tanks and distribution system to the Long Beach/Signal Hill CUPA for review. The CUPA shall determine whether revisions are necessary due to proposed project implementation. The City of Long Beach Fire and Police Departments shall review and approve the proposed project plans, including the pipeline relocation for adequate emergency access and egress procedures.	Long Beach/ Signal Hill CUPA	Prior to issuance of certificates of occupancy
<b>4.7 Hydrology and Water Quality</b>		
<b>4.7.1</b> Prior to issuance of a grading permit, the City of Long Beach shall ensure that construction plans for the project include features meeting the applicable construction activity BMPs and erosion and sediment control BMPs published in the <i>California Stormwater BMP Handbook—Construction Activity</i> or equivalent. The construction contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the City that includes the BMP types listed in the handbook or equivalent. The SWPPP shall be prepared by a civil or environmental engineer and will be reviewed and approved by the City Building Official prior to the issuance of any grading or building permits. The SWPPP shall reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and systems, design and engineering methods, and such other provisions as appropriate. A copy of the SWPPP shall be kept at the	City of Long Beach Director of Public Works/City of Long Beach Building Official	Prior to issuance of a grading permit

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>project site.</p> <p>The construction contractor shall be responsible for performing and documenting the application of BMPs identified in the SWPPP. The construction contractor shall inspect BMP facilities before and after every rainfall event predicted to produce observable runoff and at 24-hour intervals during extended rainfall events, except on days when no ongoing site activity takes place. Prestorm activities will include inspection of the major storm drain grate inlets and examination of other on-site surface flow channels and swales, including the removal of any debris that blocks the flow path. Poststorm activities will include inspection of the grate inlets for evidence of unpermitted discharges. The construction contractor shall implement corrective actions specified by the City of Long Beach Building Official, as necessary, at the direction of the City of Long Beach Director of Public Works. Inspection records and compliance certification reports shall be submitted to the City of Long Beach Director of Public Works on a monthly basis and shall be maintained for a period of three years. Inspections shall be scheduled monthly during the dry season and weekly during the wet season for the duration of project construction or until all lots and common areas are landscaped.</p>		
<p><b>4.7.2</b> During demolition, grading, and construction, the construction contractor shall ensure that the project complies with the requirements of the State General Construction Activity NPDES Permit. Prior to issuance of demolition and grading permits, the construction contractor shall demonstrate to the City of Long Beach that coverage has been obtained under the State General Construction Activity NPDES Permit by providing a copy of the NOI submitted to the SWRCB and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) number or other proof of filing to the City of Long Beach Building Official.</p>	City of Long Beach Building Official/ Construction Contractor	Prior to issuance of demolition or grading permits
<p><b>4.7.3</b> Prior to commencement of grading activities, the construction contractor shall determine whether dewatering of groundwater will be necessary during</p>	City of Long Beach Director of	Prior to commencement of grading activities

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
construction of the project. Any dewatering will require compliance with the State General Permit for discharges to land with a low threat to water quality or an individual permit from the Los Angeles RWQCB, consistent with NPDES requirements. Once it receives and reviews the NOI, the RWQCB will decide which permit is applicable and whether sampling is required. A copy of the permit shall be kept at the project site, available for City and/or RWQCB review upon request.	Planning and Building/ Construction Contractor	
<b>4.7.4</b> Prior to issuance of a building permit, the City of Long Beach Director of Public Works shall review and approve a project SUSMP. The project SUSMP shall identify all of the nonstructural and structural BMPs that will be implemented as part of the project in order to reduce impacts to water quality to the maximum extent practicable by addressing typical land use pollutants and pollutants that have impaired Los Cerritos Channel and Reach 1 of the San Gabriel River.	City of Long Beach Director of Public Works	Prior to issuance of a building permit
<b>4.7.5</b> Prior to issuance of a building permit, the City of Long Beach shall, under the direction of the City of Long Beach Director of Public Works, approve a plan to ensure ongoing maintenance for permanent BMPs. This plan shall include a statement from the applicant accepting responsibility for all Structural and Treatment Control BMP maintenance until the time the property is transferred. All future transfers of the property to a private or public owner shall have conditions requiring the recipient to assume responsibility for the maintenance of any structural or Treatment Control BMP. The condition of transfer shall include a provision requiring the property owner to conduct a maintenance inspection at least once a year and retain proof of inspection. In addition, educational materials indicating locations of storm water facilities and how maintenance can be performed shall accompany first deed transfers.	City of Long Beach Director of Public Works	Prior to approval of a Final Parcel Map
<b>4.7.6</b> Prior to issuance of a building permit, the City of Long Beach Director of Public Works/City Engineer shall review and approve a final Hydrology Plan. The Hydrology Plan shall include any on-site structures or modifications of existing drainage facilities necessary to accommodate increased runoff resulting	City of Long Beach Director of Public Works/City	Prior to approval of a Final Parcel Map

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
from the proposed project and shall indicate project contributions to the regional storm water drainage system. The Hydrology Plan shall show all structural BMPs, consistent with the project SUSMP.	Engineer	
<b>4.8 Land Use</b>		
<b>4.8.1</b> City of Long Beach Planning Commission approval of the proposed project shall include approval of a Local Coastal Development Permit to allow construction and operation of a retail commercial development in the local coastal zone, a Conditional Use Permit to allow retail trade in Subarea 19 of the PD-1 zoning district (in accordance with the General Industrial Land Use Standards), and Standards Variances for those project-specific design features provided in Chapter 3.0, Project Description. The City of Long Beach Director of Planning and Building shall issue building permits consistent with the Planning Commission's Site Plan Review, Conditional Use Permit, Local Coastal Development Permit, and Standards Variance approvals.	City of Long Beach Director of Planning and Building	Upon approval of the project by the City of Long Beach Planning Commission
<b>4.9 Noise</b>		
<b>4.9.1</b> At the time of Plan Check, the City of Long Beach Zoning Administrator shall verify that project plans include a six-foot concrete block or Plexiglas wall between Studebaker Road and any project outdoor eating areas (adjacent to Studebaker Road).	City of Long Beach Zoning Administrator	At the time of Plan Check
<b>4.9.2</b> Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and on federal holidays; and 9:00 a.m. to 6:00 p.m. on Saturdays. In accordance with the City of Long Beach's standards, no construction activities are permitted outside of these hours, and no construction is permitted on Sundays without a special work permit. At the time of plan check, prior to issuance of grading and building permits, the City of Long Beach Zoning Administrator shall verify that construction hour limitations are noted on building and grading plans.	City of Long Beach Zoning Administrator	Prior to issuance of grading and building permits



Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<b>4.10 Public Services and Utilities</b>		
<b>4.10.1</b> A Solid Waste Management Plan for the proposed project shall be developed and submitted to the City of Long Beach Environmental Services Bureau for review and approval prior to issuance of grading permits. The plan shall identify methods to promote recycling and reuse of construction materials as well as safe disposal consistent with the policies and programs outlined by the City of Long Beach. The plan shall identify methods of incorporating source reduction and recycling techniques into project construction and operation in compliance with State and local requirements such as those described in Chapter 14 of the California Code of Regulations and AB 939.	City of Long Beach Environmental Services Bureau	Prior to issuance of grading permits
<b>4.10.2</b> Prior to issuance of building permits, the City of Long Beach Director of Planning and Building shall verify that adequate storage space for the collection and loading of recyclable materials has been included in the design of buildings as well as waste collection points throughout the project site to encourage recycling.	City of Long Beach Director of Planning and Building	Prior to issuance of building permits
<b>4.10.3</b> The project applicant shall submit a Security Plan for the review and approval of the City of Long Beach Chief of Police prior to the issuance of any building permits. The Security Plan shall incorporate CPTED principles and other crime-prevention features that shall include, but not be limited to, the following: <ul style="list-style-type: none"> <li>• Interior and exterior security lighting</li> <li>• Alarm systems</li> <li>• Locking doors for all employee locations</li> <li>• Use of vines and other landscaping to discourage graffiti and unauthorized access</li> <li>• Bonded security guards</li> <li>• “No Loitering” signs posted at various locations throughout the project site</li> </ul>	City of Long Beach Chief of Police/City of Long Beach Director of Planning and Building	Verification: Prior to issuance of building permits  Activity: Prior to issuance of a Certificate of Occupancy and through the life of the project

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<ul style="list-style-type: none"> <li>Surveillance cameras for each business and all on-site parking areas</li> <li>Surveillance cameras located on-site that are capable of thoroughly monitoring Channel View Park, the Vista Street/Loynes Drive intersection, and the Vista/Silvera intersection</li> </ul> <p>All surveillance cameras shall continuously monitor all on-site and off-site locations on a 24-hour basis, and all surveillance camera video recording equipment shall have a minimum continuous two-week capacity to the satisfaction of the City of Long Beach Chief of Police. The City of Long Beach Director of Planning and Building shall verify inclusion of all required physical public safety improvements prior to issuance of any building permits. All physical requirements in the approved Security Plan shall be installed and fully operational prior to issuance of any Certificate of Occupancy.</p>		
<b>4.11 Transportation and Circulation</b>		
<p>4.11.1 Prior to the issuance of a grading permit, the project applicant shall, under the direction of the City of Long Beach Traffic Engineer, design and implement a construction area Traffic Management Plan. The plan shall be designed by a registered Traffic Engineer and shall address traffic control for any street closure, detour, or other disruption to traffic circulation and public transit routes. The plan shall identify the routes that construction vehicles will use to access the site, the hours of construction traffic, traffic controls and detours, off-site vehicle staging areas, and parking areas for the project. The plan shall also require project contractors to keep all haul routes clean and free of debris including but not limited to gravel and dirt.</p>	City of Long Beach Traffic Engineer	Prior to issuance of grading permits
<p>4.11.2 <b>Studebaker Road/2nd Street:</b> Prior to issuance of any Certificates of Occupancy, the applicant, to the satisfaction of the City of Long Beach Director of Public Works, shall convert the existing westbound right-turn lane into a through lane and shall construct an exclusive westbound right-turn lane, with reimbursement if possible, according to the Boeing Specific Plan's fair-share commitment.</p>	City of Long Beach Director of Public Works	Prior to issuance of any Certificates of Occupancy

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>4.11.3 <b>Studebaker Road/Loynes Drive:</b> Prior to issuance of any certificates of occupancy, the applicant, to the satisfaction of the City of Long Beach Director of Public Works, shall complete the following:</p> <ul style="list-style-type: none"> <li>• Provide one westbound left-turn lane, one westbound through lane, and one westbound right-turn lane at the project driveway at the Studebaker Road/Loynes Drive intersection. In addition, a northbound right-turn lane and a southbound left-turn lane shall be constructed. The inside eastbound right-turn lane shall be converted to an eastbound through lane for vehicles entering the project site.</li> <li>• Change the traffic signal phasing for the northbound and southbound left-turn movements at Studebaker Road/Loynes Drive to protected-permissive turn movements.</li> <li>• Restripe northbound Studebaker Road (36 feet wide) between the south driveway and the SR-22 eastbound ramps to provide three (12-foot-wide) through lanes. The third northbound through lane will terminate at the northbound right-turn lane at the SR-22 eastbound ramps. Any encroachment into State right-of-way will require review and approval by Caltrans.</li> </ul>	City of Long Beach Director of Public Works	Prior to issuance of any Certificates of Occupancy

## 8.0 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2(B) of the State CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. The Executive Summary of this document contains a detailed summary table that identifies the project's environmental impacts, proposed mitigation measures, and the level of impact significance after mitigation. The following is a summary of the impacts that are considered significant and unavoidable after all mitigation is applied. These impacts are also described in detail in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, and Impacts and Mitigation Measures.

### 8.1 INVENTORY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

#### Air Quality

**Construction Air Quality Impacts.** Air quality impacts would occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during demolition, grading, and site preparation include exhaust emissions from construction vehicles and equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces and demolition activities, as well as by soil disturbances from grading and backfilling. Even with implementation of mitigation measures and compliance with applicable rules and regulations, the following construction impacts related to air quality remain significant and adverse:

- Construction equipment/vehicle emissions during demolition and grading periods would exceed the SCAQMD established daily and quarterly thresholds for NO<sub>x</sub> even with implementation of Mitigation Measures 4.2.1 through 4.2.8. Emissions of other criteria pollutants would be below the thresholds.
- During peak grading days, total construction emissions of NO<sub>x</sub> and PM<sub>10</sub> would exceed the daily thresholds established by the SCAQMD even with implementation of Mitigation Measures 4.2.1 through 4.2.8. During demolition and regular grading days, NO<sub>x</sub> emissions would exceed the thresholds as well. Emissions of other criteria pollutants would be below the thresholds.

**Long-Term Regional Air Quality Impacts.** Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The proposed commercial use would result in both stationary and mobile sources. The stationary source emissions from the commercial uses would come from the consumption of natural gas. Emissions from the project-related mobile sources would exceed CO, ROC, and NO<sub>x</sub> thresholds based on emission factors for 2004. Emissions of SO<sub>2</sub> and PM<sub>10</sub> would not exceed their respective thresholds. Therefore, project-related long-term air quality impacts would be significant. Because most of the project's air quality impacts are generated by vehicle emissions, implementation of Mitigation Measure 4.2.9 will

not substantially reduce any long-term air quality impacts of the project. Therefore, long-term impacts remain significant and adverse.

**Cumulative Air Quality Impacts.** The project would contribute criteria pollutants to the area during temporary project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction may result in substantial short-term increases in air pollutants. This would be a contribution to short-term cumulative air quality impacts.

The project would also result in increases in long-term operational emissions. The project would contribute cumulatively to local and regional air quality degradation.

The Basin is in nonattainment for CO, PM<sub>10</sub>, and O<sub>3</sub> at the present time. Construction of the proposed project, in conjunction with other planned developments within the cumulative study area, would contribute to the existing nonattainment status. Therefore, the proposed project would exacerbate nonattainment of air quality standards within the Basin and contribute to adverse cumulative air quality impacts.

## **Public Services and Utilities**

**Solid Waste.** There is insufficient permitted capacity within the existing solid waste system serving Los Angeles County to provide for long-term nonhazardous solid waste disposal needs (Class III landfills). Although the project's contribution is not the sole cause of the shortfall, when coupled with solid waste generated by future projects, the impact to solid waste disposal capacity is significant. Mitigation Measures 4.10.1 and 4.10.2 will assist the City in its effort to meet waste-reduction goals. Project impacts related to compliance with federal, State, and local statutes and regulations for solid waste will be reduced to a less than significant level. The project may, however, result in a potentially significant cumulative impact to solid waste disposal capacity in the County of Los Angeles. Implementation of the above-mentioned mitigation measures will facilitate recycling of solid waste generated by project site land uses to the extent feasible. Due to the existing deficiency in long-term waste disposal capacity at waste disposal facilities in Los Angeles County, cumulative project impacts associated with solid waste disposal capacity at Class III landfills will remain significant and unavoidable.

## **Traffic and Circulation**

The following project intersection impacts cannot be mitigated. Therefore, these project impacts remain significant and adverse.

### **Weekday Peak Hour**

- **Studebaker Road/SR-22 westbound ramps:** Improvements to Studebaker Road/SR-22 westbound ramps would require potential encroachment into the Los Cerritos Channel immediately adjacent and parallel to Studebaker Road. In addition, Caltrans has no plans to

improve this facility. As such, there are no feasible improvements at this location that would mitigate the project's impact. Therefore, this intersection would experience a significant unavoidable impact during the weekday period.

### **Weekend Midday Peak Hour**

- **PCH/7th Street:** Due to right-of-way constraints along 7th Street, there are no feasible improvements at this location that would mitigate the project's impact. Therefore, the proposed project creates a significant unavoidable impact at this location during the weekend period.
- **PCH/2nd Street:** Due to right-of-way constraints at this intersection, there are no feasible improvements that would mitigate the project's impact. Therefore, the proposed project creates a significant unavoidable impact at this location during the weekend period.

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